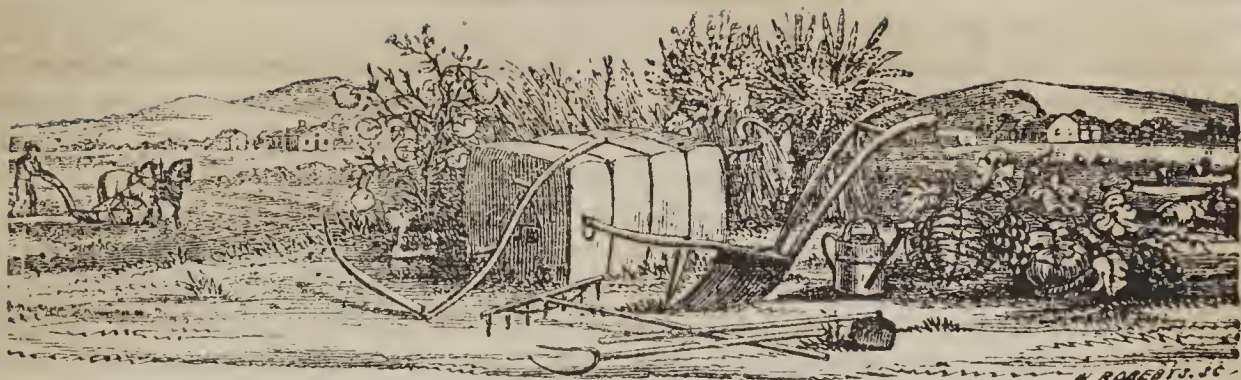


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THE FARMER AND PLANTER.

Devoted to Agriculture, Horticulture, Domestic and Rural Economy.

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BY GEORGE SEABORN,

Editor and Proprietor.

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For the Farmer and Planter. Fattening Animals.

MR. EDITOR:—It should be made a primary object to fatten animals intended for slaughter, as rapidly as possible, if we wish to obtain the greatest quantity of meat in proportion to the amount of food consumed. The reason is this: It takes a certain amount of food daily to support life, or to supply the natural waste of the body. For instance, suppose fifteen bushels of meal, and five hundred pounds of hay will bring an animal to a certain degree of fatness in forty days, that is allowing a peck and a half of meal, and twelve and a half pounds of hay to be consumed daily. Now, suppose that it takes a fourth part of this daily allowance to support life and supply the waste of the body; now, if

instead of feeding out our whole quantity of food in *forty* days, we prolong the time to *a hundred and sixty* days, the food would be wasted, and the trouble and labor of feeding expended for nothing, as the animal might be in worse condition at the end of that time, than when we began feeding. This is a matter that has been too little regarded, and as a consequence, there has been a useless expenditure of food and labor. In the animal economy the accumulation of fat and extra flesh is only a deposit of superfluous nutriment, which, not being required by the system at one time, is laid by for future emergencies, and it must be obvious that the larger the quantity of food consumed daily with a good appetite, or to digest thoroughly, the greater will be the amount of flesh and fat gained in proportion to the whole quantity of food consumed.

Another essential point in fattening animals is, to keep them in a quiet and comfortable condition. We do not propose to engage at present in a consideration of the relative action of the different organs of the animal body. Every farmer has, however, noticed more or less the connection which the nervous system has with the digestive and secretive organs. An animal may consume a large amount of food, but if it is so situated that it is restless and discontented, the accumulation of fat will be only at a slow and unprofitable rate. I have seen hogs and cattle intended for slaughter, rendered so entirely uncomfortable from the coldness and filthiness of their situation, that they scarcely thrive at all, though they consumed and wasted more food than they would have required if properly cared for. Hence

the saying that "an animal will fret off flesh faster than it can be gained."

Animals should not be confined to wet and muddy places; and, above all things, they should not be obliged to take their food in such places. Cattle and sheep that are fed grain and vegetables, should be provided with clean troughs. Fattening hogs should be fed in clean troughs, or on clean, dry floors; and their sleeping places should be dry and sufficiently warm. They should not be expected to perform much labor in the compost yard. All exertion is attended with a waste of muscular tissue, and the more laborious the exertion, the greater the expenditure. Hence, the increase in weight will be most rapid by allowing the animal to remain as much at rest as is consistent with the preservation of its health.

Substances in which the nutriment is much concentrated should be fed with care—there is danger, especially when the animal is first put to feed, that more may be eaten at once than the digestive organs can manage. Meal of corn is highly nutritive, and when properly fed, causes animals to fatten faster than almost any other food. They will not, however, bear to be fed exclusively on this article for a great length of time. Meal made from the heaviest varieties of corn, especially that from the hard, flinty kinds, is quite too strong for cattle, sheep or horses to be full-fed upon. Hence, one of the advantages of having the cob ground with the corn—by which the nutriment is diffused through a greater bulk—lays lighter in the stomach—and is more easily digested. The effect of corn meal on animals, some suppose to be similar to that sometimes produced on our own species by the use of fine wheaten flour—the subject becomes *dyspeptic*, and is forced to use bread which has the bran mixed with the flour. The mixture of the cob with the meal answers the purpose of the bran—the health of the animal is preserved, and the process of digestion goes on uninterruptedly. In fact, the advantages of grinding the cob and corn together for feeding cattle, may be said to be well established. For hogs, the benefit of the cob is not quite so evident, those animals appearing to be better adapted for taking their nourishment in a more concentrated form than those that ruminate or chew their food; yet, food sufficiently bulky to effect the distention of the bowels, is necessary for hogs. Hay or straw, cut into lengths so short as to be readily mixed with meal, answers a good purpose in rendering the meal easy of digestion, and enabling the animal to extract from it all the nutriment.

In regard to the relative value, compared with grain of different kinds of vegetables, for feeding stock, there is, perhaps, more diversity of opinion than on any other branch of husbandry. Some for instance, believe that four bushels of potatoes (Irish) are equivalent to one bushel of corn meal—others think that potatoes should be reckoned higher—others again hold them less valuable—while some declare that stock will scarcely fatten at all on potatoes, and that for milk cows, if they increase the quantity, they injure the quality of the milk. It is not easy to understand fully the cause of such contrary opinions, but there is no doubt that it may be considered partly attributable to the different degrees of nutriment which the same kinds of vegetables possess when grown in different soils, and under different circumstances, and partly to the different systems adopted in feeding. According to some chemical analyses, turnips and other vegetables contain considerably more nutriment when grown on some soils, or by the aid of some manures, than when grown on other soils. Potatoes produced in soils deficient of carbonaceous matter, are acknowledged to be less nutritive than others. Green corn, millet, and dourah corn, is also fed by many as being good and of some value, as it contains a great quantity of succulent matter, and is very coarse, which keeps the bowels in an easy condition, and as a promoter of good health. For hogs, some use the rata бага, and consider it superior to any other vegetable; but with all animals we must not forget the salt box. Probably the principal cause of vegetables having been undervalued for animals, is, their having been used in an improper manner—It is a well known fact that graminivorous animals require food of a fibrous nature, and that an essential junction of some species, rumination cannot be carried on without it.—It is also known that articles alluded to, have, when fed by themselves, a laxative or cathartic action; and thus, for reasons we see the necessity of feeding hay and straw with vegetables.

D****.

Ravenscroft, S. C., 1856.

For the Farmer and Planter.

How to make Shingles with a Circular Saw.

MR. EDITOR:—Having, more than a year since, contrived a plan by which a common Circular Saw-mill may be made to cut shingles with great facility, I have concluded to furnish you with a description of the simple structure, and the *modus operandi*, believing it to be the

interest of most men owning such Mills, and needing shingles for domestic uses, to resort to this plan for getting them, in preference to the old mode of riving and drawing, especially where free splitting timber is hard to find. But whether it would be advisable for any of them to cut for market, will depend upon the price to be obtained for the shingles, and the lumber necessary to make them; it requiring of one and a fourth inch plank, 292 feet, superficial measure, to make 1000 shingles, 21 inches long, or 250 feet to make the same number, 18 inches long, and 4 inches wide. The timber being first sawed into plank 4 inches wide, and 5-4 inches thick, and then cut into lengths of 21 inches, may be converted into beautiful shingles at the rate of 1200 to 1500 per hour. I speak from the record of a fair trial. This may be done on a frame thus made:

Take a piece of timber about 4x6, and near the length of the carriage; at intervals of 22 inches, (one inch being allowed for free play,) run a hand-saw across the thin way, near 5-8 of an inch deep, and then trim out from the bottom of the cut to the next line, the wood thus removed being in the shape of a shingle. Trim all the spaces in like manner, and then lay this piece on another of the same size, leaving the bottom piece projecting $\frac{1}{4}$ of an inch, and then pin them securely together. Next, put them on the carriage, the shoulders in the upper piece towards the saw. Set this frame so that the saw will equally divide, the thin way, a piece 21 inches long, 4 inches wide, $1\frac{1}{4}$ inch thick, when put against each of the shoulders and kept firmly to the frames, thereby making two shingles of each stick. When so arranged, the frame is properly adjusted for making shingles 21 inches long, and nearly $\frac{3}{4}$ of an inch thick at one end, and about $\frac{1}{4}$ of an inch at the other. But before beginning the operation, lay a plank permanently on the side next to the saw, level with the top of the bottom piece, the edges nearly touching, and on the plank put a scantling 4 inches thick, leaving sufficient space between it and the upper piece, to receive the timbers from which the shingles are to be made. In the space thus formed, while the carriage is going forward, two small boys may drop in the timbers to keep the saw constantly supplied. Some one must be seated just before the saw, who, with a shingle in hand, may keep each piece to the frame, as the same is passing through it. A spring might be so fixed as to answer the purpose, but some danger might attend it. One other hand to attend to the lever, which reverses the motion of the carriage,

who, also, may assist the two boys in supplying the saw with timber; and one other to take the sawed shingles away, will constitute the force required.

If any of the shingles should turn out too thick, owing to the timbers being improperly prepared, throw them aside until a sufficient quantity is obtained, then put them on the frame again, and the saw will trim them to the right thickness and shape. I have two roofs on my place of shingles cut after the manner above described, which look better, turn water equally as well, and as they are of superior timber, I have no doubt they will last as long, if not longer, than the drawn shingled ones. My advice, therefore, to any one owning a Circular Saw-mill, if needing shingles, if capable of understanding this mode of operating, is to resort to it with the utmost confidence of success.

P. Q.

PINARLA, near Leesville P. O. }
Lexington Dist. S. C., July 17, '56. }

For the Farmer and Planter.
Poland Oats.

MR. EDITOR:—I secured seed enough to plant some 10 feet square of ground. I planted them the first day of March, and gathered them the first of July. Their yield has exceeded my most sanguine expectations. I lost some considerable of them by the chickens, and by its falling down and blasting. I, however, gathered nearly a half bushel of good, well matured oats. I think it will mature at least two weeks sooner than the common oats, and the heads and grains are much larger. I am well pleased with them so far. I send you a few grains, and would like to know your opinion about them. I also send you a few grains of Clover that has been recommended to me as being fine for the South. It grows only in the winter. I have never planted any of them yet. A friend gave me a handful of the seed, and said I would be well pleased with them. He gave it no name but Winter Clover. If you know anything about it, will you be so kind as to give me the benefit of your information?

I have not received the July No. Will you be so good as to send me the back numbers of the present volume, as I wish to have them bound at the end of the year, and would like to have the whole volume?

Yours, most respectfully.

W. G.

Aberly Farm, July 8, 1856.

REMARKS—W. G. will accept our thanks for the Oats sent me. We have never seen a more plump and

beautifully formed grain of Oats than they are. Shall take special care of them. We some years since cultivated what was called "Poland Oats," but they got so mixed with other kinds, that we have lost sight of them.

The other seed (burs) sent us is, the celebrated "Yellow Clover," about which, for and against, much was written a few years since. Several articles may be found in back numbers of the Farmer and Planter, which we will endeavor to send you. We have had it growing, but on a poor lot, which we have just had broken up and manured for turneps. It will not do on thin land, but will probably succeed well on your rich calcarious Florida lands.—Ed.

For the Farmer and Planter.
Large Yield of Cucumbers.

MR. EDITOR:—Being informed by a friend of mine, who resides in Greenville District, and one whose veracity may be relied on, of an uncommonly large yield of Cucumbers, which he raised in 1854, from a very small number of vines, I will give you his mode of planting and cultivating that delicious vegetable, as it may probably be interesting to some of the readers of your valuable paper; and may, perhaps, stimulate some of them to adopt the same plan. It is this: Having burnt off two or three brush piles down in a low, moist piece of bottom land, near a running stream of water, he went down on the 23d of June, to sow some cabbage seed, and with them put in a few Cucumber seed—nine seeds of which only came up and lived; five in one bed, three in another, and one in a third. These vines received but one hoeing, and yielded more than three hundred fine, large Cucumbers. Has, or can any one beat it? I am yours, respectfully,

T. F. ANDERSON.

Calloway, July 18, 1856.

From the Southern Cultivator.
Adamantine Candles.

EDITORS SOUTHERN CULTIVATOR:—Are the recipes published in the public journals for making Star and Adamantine Candles "sure fire"? I answer, for several reasons, they are not? First. Star and Adamantine Candles, without machinery and operose processes, cannot be made. The calling a hard tallow candle "adamantine" is a misnomer. If we must have a hard name, call them diamond candles and avoid this confusion of names. Secondly. The recipes (if indeed they are not wholly worthless,) are so blindly and blunderingly given in most cases that they cannot be made available except by one who understands thoroughly the process, and hence needs no instruction. Thirdly. Many of them involve a heavy expense for

materials, which at once condemns the process. Fourthly. A radical fault with most newspaper recipes, they spend so much time and space in extolling the *inestimable value* of the remedy or process, that no opportunity is left to give the very necessary details of manipulation. The imagination of the reader is so wrought up in his unbounded expectations that his failure, from the want of these details, disgusts and disheartens him.

Some smart fellow away at the North—Massachusetts I believe—has made the wonderful discovery that saltpetre and alum will harden fats—known for many generations back. He extols greatly his recipe; says it is worth \$50 to him; makes adamantine candles out of lard, &c., &c. He directs 12 lbs. lard, 1 lb. alum, and 1 gill water.

I tried this recipe with several other experiments, and here are the facts. I first of all struck out the adamantine part; next weighed carefully into the heating vessel the requisite quantity of saltpetre and alum; then the water; found the latter deficient and added two or three times the quantity (a little too much will not hurt); when the salts were dissolved, I added the lard. As the heat increased, bubbles soon came to the surface and continued to rise until the operation was suspended and would have continued probably until the whole was burnt to a coal.

No change was perceptible in the lard, hot or cold, until the water was well nigh all gone. The white opaque globules commenced rising and falling; these increased in number until a white milky fluid covered the bottom, from which bubbles of vapor or gas still rose. This milky fluid gradually thickened until it assumed the consistence of a thick ropy curd. At this stage the lard had assumed more of a redish cast. The heat was continued; the curd became hard and granular, and formed into irregular lumps like old, dry pine-apple cheese, but pure white in color; the lard was quite red and fumes of nitrous acid were escaping to a small extent.—Here the process was stopped and the lard *spoiled* for all purposes save the soap boiler. It had a strong, rancid, offensive odor. No scum of any consequence had risen to the surface—all the impurities present had attached themselves to the curd at the bottom.

Secondly. The process was repeated with fresh material and stopped at the *thick curd* stage; lard poured off from the curd; the latter was boiled in water, cooled and found to present 3 layers—lard at the top, water below and

white granular deposit at the bottom. The water was tested, and contained sulphuric acid (from decomposition of alum) in quantity; thus showing that the alum had been instrumental in effecting the change. The deposit was decomposed by strong sulphuric acid and yielded fatty acids on top of the solution. These with many other experiments I need not detail, lead to the following conclusions:

1st. Lard is considerably hardened by this process at the curd stage and changed (when cold) to a straw color which may be removed in a great measure by subsequent boiling in water. It may make a satisfactory candle for us in winter, but certainly will not in summer.

2d. A longer continuation of the heat does not give any firmer consistence, while it greatly deepens the color. And if the heating process be much shortened the consistence is not attained at all.

3d. Alum alone does not harden fats, it only whitens them, and yet it is a necessary ingredient in the hardening process.

4th. Tallow when treated as in the lard experiment to the curd stage, becomes quite hard and firm, and the color is slightly if at all injured. It makes a most excellent summer candle.

5th. Tallow treated by heat with half its weight of water acidulated with 5 per cent. of sulphuric acid is but slightly hardened, if at all.

6th. The loss of fat is nothing if carefully conducted. In fact my experiments show an increase of 1 to 2 per cent. in weight.

7th. EXPENSE.—100 lbs. tallow, say \$12 50; 8½ lbs. saltpetre, at 15 cents (now 30) is \$1 24; 8½ alum, at 8 cents, is 66 cents, in all \$14 40; cost of hardened tallow say 14½ cents per pound.

8th. The heat should be regulated so as to prevent excessive boiling, and the whole constantly stirred.

9th. If the process be conducted in an iron or brass kettle, the liberated sulphuric acid will act upon the metal. A suitable vessel is the iron preserving kettle, lined with porcelain, or an earthen pot which will stand heat.

10th. Some attention and skill is necessary in preparing a suitable wick—much depends upon this in a good candle.

11th. The outside of a candle may be coated with wax by previously filling the moulds (cold) with melted wax, and immediately pouring out all which is not chilled on the sides—then adjust the wick and pour in the tallow as cold as it will well run. The candles, when removed, will generally present a crack down the side—caused by the greater contraction of the

wax—this should be filled up by means of a warm case-knife and a little wax.

I trust the "better half" of your Texas correspondent, W. A. M., together with other inquirers, will now be able to make a good hard tallow candle, and for the present at least, give up the idea of homespun adamantines.

Rome, Ga., May, 1856.

R. B.

From the Papers of the Nottoway Farmers' Club.

Comparative Experiments with Guano.

Following it in and putting it in along with the Wheat—Drilled and Broadcast on Corn.

In compliance with the constitutional requisition of our club, making it obligatory upon each member to report in writing the result of some operation or experiment made during the year, I report that, in the month of August, 1853, I applied 300 pounds of guano to two acres of land then being fallowed with a two-horse plow for wheat; the remainder of the field was fallowed in the same way, but no guano was applied until October, the time of seeding, when about 150 lbs. per acre was sown, the guano and wheat both turned under with a one-horse turning plow, a portion immediately adjoining the first mentioned two acres, and so nearly alike that I could not perceive any difference. The wheat was sown on both fields about the same time—perhaps the same day. The wheat on the first two acres was covered with a twenty-four tooth harrow. Throughout the season and at present the difference in favor of sowing guano and wheat at the same time was as four to one.

I would, as one of the committee appointed to test the value of guano applied to corn broadcast at the time of planting, and one-half the same quantity applied in the drill, the other half broadcast at the last plowing, report that, in April, 1854, I measured two contiguous spaces of land, about 70 yards square each, of as nearly equal fertility and texture as could be obtained. To one acre I applied 3½ bushels (estimated to be 200 lbs.) guano broadcast, and turned it in with a one-horse plow; to the other acre I applied 1½ bushels guano in the drill at the time of planting. The drills were opened by throwing out one furrow each way with the single plow, the guano sown in the drill and closed by throwing back two furrows with the same plow. The drills for planting were opened with a trowel hoe—both pieces planted the same day and in the same way, except as above—the land inclining to sandy. At the last plowing of the corn, I applied 1½ bushels guano broadcast to the drilled acre—work done with the cultivator. The broadcast acre produced 4 barrels, 4 bushels and 3-16 of a bushel. The drilled acre, 4 barrels and 4 bushels corn. Both acres in all respects alike, planted at the same time, worked on the same days and with the same implements. Both suffered from drought, as did the rest of my crop.

WM. R. BLAND.

BEST MODE OF APPLYING GUANO TO CORN.

Mr. President: In accordance with a res-

quest of the club, the following experiments were made with guano on corn, in order to ascertain the best mode of its application.

I selected four acres of thin land, about the same quality. On the first I applied 200 lbs. of guano broadcast, and turned it under the 1st. of March with a double plow.

On the second acre, I applied 200 lbs. guano on the drill, in the following way: The land having been previously fallowed with a double plow, furrows were made at the time of planting by running twice in a place with a single plow, in which the guano was drilled; a harrow was then run over it, which covered it two or three inches deep; the corn was then dropped and covered with harrows.

On the third acre, I used no guano.

On the fourth, I applied 100 lbs. of guano in the drill, in the same way as on the second acre; and at the second plowing I applied 100 lbs. in furrows made by a single plow on each side of the corn, and covered with single plows. The results were as follows:

| | |
|---|---------|
| 1st acre, 200 lbs. broadcast, produced 4 barrels, 4 bushels, and 3 pecks, at \$3 50, | \$17 44 |
| 2d acre, 200 lbs. in the drill, produced 3 bbls., 4 bushels, and 3 pecks, at \$3 50, | 13 95 |
| 3d acre, nothing used, produced 1 bbl., 4 bushels, and 2 pecks, at \$3 50, | 6 75 |
| 4th acre, 100 lbs. in drill and 100 lbs. at side, produced 5 bbls., 2 bushels, and 1 peck, at \$3 50, | 19 16 |

In the above there is nothing said about short corn, as it was put at half price, and carried out in the estimate of each acre.

By adding to the product of the unimproved acre, which was \$6 75, the cost of guano and interest thereon for one year, (say \$5 30) and deducting the amount, \$12 05, from the product of the first acre, the remainder (\$5 39) will show the profit by the use of guano, applied broadcast. In the same way, \$1 90 is the profit by its use in the drill, and \$7 11 is the profit by its use as applied on the fourth acre.

But in order to ascertain more accurately the profits by the use of guano, we should charge for cultivation, which I will put down at \$5 per acre, which is moderate, supposing the laborer to find himself and horse; also \$5 30 per acre for guano used. By this estimate, it will be found that the nett profit on the unimproved acre is \$1 75; on the 1st acre, \$7 14; on 2nd, \$3 65; and on the 4th, \$8 86. The result of the above experiments is decidedly in favor of using half the guano in the drill at the time of planting, and half at the second plowing. I will state, in connection with these experiments, that the corn on the acre on which the guano was applied broadcast, looked decidedly better than any other until it was about three feet high, about which time that on the acre on which the 200 lbs. guano was used in the drill, overtook it. This acre, during the summer, and even after the tops were cut, I thought would have produced at least a barrel more than any other, but to my surprise I found the 4th acre produced the most. This is an exemplification of the fallacy of judging as to the results of experiments by the eye.

Respectfully submitted,

WM. IRBY.

COMPARATIVE EFFECTS OF 300, 200, AND 100 LBS. OF GUANO ON AN ACRE OF CORN.

As one of a committee of three appointed to make experiments with guano upon corn, I have performed, very satisfactorily to myself, the duty assigned me by the club, and hereby report the results to which I have come.

The object of the experiments was, to test the comparative effects of 300 lbs., 200 lbs., and 100 lbs. of guano, on an acre of corn.

Being unfavorably situated, however, for executing my task, I have conducted the experiments only in a *pro rata* form; that is a half acre of ground was selected and divided into four parts, or lots, each containing five rows of corn.

As late as about the 15th of May last, this plot of ground, which was poor and had been seeded to oats with guano the year before, was thrown into 5 feet beds with the single dragon, and planted with corn at 2 feet distance. Before fallowing, three of the lots had been dressed respectively with 38 lbs., 25 lbs., and 13 lbs. guano each, while the fourth lot was left undressed, for comparison.

Besides being planted late, the crop was badly worked. It suffered, also, from the depredations of birds, especially the lot which was undressed—being an outside one, and remotest from the houses.

On the 30th November, the corn was gathered and measured, as follows, (at the rate per acre:)

| | Lbs. guano. | Bbls. | Bush. | |
|-----------|-------------|-------|-------|-----------------------|
| 1st acre, | 300 | 2 | 4. | exclusive of nibbins. |
| 2d acre, | 200 | 2 | 2, | " " |
| 3d acre, | 100 | 2 | - | " " |
| 4th acre, | — | - | 4, | " " |

Estimating corn to be worth \$3 50 per barrel, and putting guano at \$50 per ton, we arrive at the following results in gain and loss. Deducting in each case four bushels as the unaided product of the land.

| | Bls. | Value. | Cost of Guano. | Gain. | Loss. |
|----------------|------|--------|----------------|---------|---------|
| 1st acre, 2 | \$7 | \$7 50 | | | 50 cts. |
| 2d acre, 1 3-5 | 5 60 | 5 00 | | 60 cts. | |
| 3d acre, 1 1-5 | 4 20 | 2 50 | \$1 70 | | |

On giving credit to the guano only for the increased crop produced by it, and allowing 1 barrel per acre to the unaided powers of the land, the result will be:

| | | |
|-----------|-------|--------|
| 1st acre, | loss, | \$4 00 |
| 2d acre, | " | 2 10 |
| 3d acre, | " | 1 80 |

Respectfully submitted.

G. FEEZGERALD.

Nottoway, April 12, '55.

From the Southern Planter. Experiments with Manures.

In April, 1853, I made a compost of one ton Peruvian Guano, half ton of Plaster, and two tons of leached ashes. I applied this mixture in the hill to corn on about twenty acres of land, ten acres low grounds, and ten acres high land (or hills). This experiment paid a larger profit than any I have ever made on corn. The distance was four feet by two, furrows for planting opened with a two horse plow, the corn

dropped, and the compost upon it, and covered with a coulter; on the high land one stalk in the hill, on the low grounds one and two alternately. The low grounds averaged about twelve barrels, and the high land about six barrels per acre. I think the yield in both cases was doubled by the application.

About the 6th of June, 1853, I applied two tons of Peruvian Guano on corn at the rate of 150 pounds per acre, sowed in a narrow string about the corn and covered immediately with a mould-board plow, the dirt thrown to the corn. This application was on low grounds, and increased the yield per acre, I suppose, from two to three barrels.

Experiments with Guano and Kettlewell's Renovator. On a piece of poor low grounds, containing 2200 square yards, I applied between the 5th and 10th of June, 1853, 75 lbs. P. guano, sowed close to the corn and covered immediately with the dirt thrown to the corn; gathered and measured three barrels and three pecks, making about eight barrels per acre. On the same quantity and quality of land, and immediately adjacent, I sowed and covered in the same way one barrel of Kettlewell's Renovator, costing here within a fraction of \$4, and gathered and measured two barrels and four bushels of corn. Difference in favor of guano, four bushels and 3 pecks.

4 $\frac{3}{4}$ bushels corn at 70 cents, . . . \$3.32 $\frac{1}{2}$
75 lbs. Peruvian guano at 2 $\frac{1}{2}$ cts. . . . 2.06 $\frac{1}{2}$

Nett gain \$1.26 $\frac{1}{2}$ or about \$2.75 per acre.

I do not conceive that the Renovator increased the yield at all, and I am led to this conclusion from other experiments I made with it. I sowed seventeen barrels of it on tobacco land in 1853, at the rate of one and a half barrels to the acre, costing per acre here nearly six dollars, and if it benefited the crop I am entirely ignorant of it. In order to give it a fair trial, I reserved two barrels and applied it in the hill to corn in 1854, according to Mr. Kettlewell's directions, and I could perceive no benefit whatever. Mr. Kettlewell advised its application with Peruvian guano if I had it, and without the guano if I had not. In my experiments I preferred to try it alone, and let it stand or fall upon its own merits.

In 1854 I used about four tons of Peruvian guano on corn land, sowed broad-cast in the drill from 150 to 200 lbs. per acre; very little benefit was realized from this application, in the increase of grain, except on damp spots, but a decided increase in the quantity of fodder. I also applied two tons Peruvian guano on tobacco land, 300 lbs. to the acre, in 1854, without any decided advantage in the growth of the plant, but I perceived it thickened and ripened faster in the fall, and was ready for the knife earlier than that upon which the application was not made, thus avoiding any risk of frost.

In 1855 I selected damper land (but not subject to inundation) for the application of guano on tobacco, and applied from 300 to 400 lbs. per acre in the drill. This experiment succeeded admirably, and, should the tobacco bring a rea-

sonable price, a good per cent. will be realized. The same year I measured one acre of poor land, very slightly manured with summer cow pens in 1854, and applied to this piece a compost of 200 lbs. Peruvian guano, 200 lbs. leached ashes, 100 lbs. plaster, and one bushel table salt, costing about \$7, sowed in a drill, and the hills made upon it. This was a remarkably good piece of tobacco, and paid better for the outlay than any other experiment.

I have used stable (horse) manure with and without plaster in the hill for corn with beneficial results, especially so in a wet season. I consider there is but a slight difference in the yield of corn in favor of guano over this manure but guano has the advantage in the smaller bulk to be carried to distant parts of the field, and the greater rapidity and less labor in its application.

In my experiments with wheat, I have not been very successful, owing measurably to the advice of your contributors and farmers with whom I have conversed, as to the quantity to be used, from which the largest per centum could be realized. Taking that advice I used it at first too sparingly for this region to counteract the ravages of the joint-worm. From experience and observation I have learned that in this section of country, on poor land, unaided by other fertilizers, less than 300 lbs. Peruvian guano per acre will not pay well, and then the farmer may not calculate on much clear gain, unless he sell at high figures.

In 1853, I made a trial of one ton Peruvian guano on oats, sowed on high land, and have not since repeated the experiment; that being a dry season and the experiment consequently not succeeding well.

In dripping seasons guano acts charmingly on spring and summer crops. But the farmer will be disappointed in dry seasons, unless he be very cautious in the selection of the land for its application.

I agree with Mr. Noland, that rolling the seed corn in guano is worth the trial, if only to accelerate the growth of the young plant, so as to push it out of the way of worms and other pests; and moreover the great advantage, in my opinion is, to enable the farmer to work it earlier and get it in good order by harvest; for my little experience teaches me that in the main the working of the corn crop must cease then, unless the farmer has an extra force to keep his plows running in harvest time.

ROBERT N. PRICE.

MYCHUNK, near Keswick Depot, }
Albermarle Co. }

From the Real Estate Register.

The Chemistry of Building Materials.

The word "calcareous" strictly signifies "of or belonging to lime," and implies the presence and, in general, the predominance of that substance in the body to the title of which it is prefixed; but it has long been extended, both by theoretical and practical men, so as to include bodies containing magnesia as well as lime, and chemists embrace under the term "calcareous earths" both of these substances.

The english word "limestone" has a similar meaning. It signifies a stone which certainly contains lime, but may also contain magnesia; and as the earths occur in limestone united with carbonic acid, so as to form carbonate of lime and carbonate of magnesia, a calcareous building stone or limestone may be defined to be a stone consisting in greater part of carbonate of lime, or of carbonate of lime and carbonate of magnesia. This definition has reference solely to the chemical compositions of limestones, but their physical structure is of equal importance in estimating their architectural value.

Considered chemically, the calcareous building stones may be divided into three groups:

Simple limestones or limestones proper, consisting of carbonate of lime.

Magnesian limestones proper, consisting of carbonate of lime and carbonate of magnesia.

Composite limestones, containing, in addition to one or both of the calcareous carbonates silica (Sand,) silicate of alumina (clay,) oxide of iron, bitumen, phosphate of lime (bone-earth,) and the like, and which are named according to the predominating additional ingredients, silicious, argillaceous, clayey, bituminous or phosphatic limestones.

In the preceeding enumeration, those recent aqueous calcareous deposits, called by geologists calc-tuffs, analogous to stalactities and stalagmites, are omitted, because though used in other countries as building materials, they are unknown as such in Great Britain or the United States. Many of the Roman edificies, alike ancient and modern, are constructed of such a stone, called travertino or taverline.

Simple limestones, so far as their application in building is concerned, may be divided into three classes:—

Crystalline limestones or marbles.

Compact or massive limestones.

Olitic limestones or roe-stone.

Crystalline Limestones.—Simple limestone is most perfectly represented by white statuary marble, such as that of Paros or Carrara. It may be regarded as chemically pure carbonate of lime, consisting of fifty six per cent. of lime and forty-four per cent. of carbonic acid. Its structure is uniform and crystalline; the component crystals being very small, but closely adherent, so that it resembles loaf sugar except that it is much less porous. The crystals are in thin scales, transparent, and plates of marble of considerable thickness allow a certain amount of light to traverse them, and are indebted to its passage for a portion of the peculiar lustre, so devoid of opaque chalkiness, which belongs to pure white marble. Its uniformity of structure allows it to be quarried in large blocks, and its comparative softness and crystalline texture to be easily chiselled, nor does any stone take a more uniform and beautiful polish.

The colored marbles, (properly so called) are all less pure than the white, the coloring matter being always some foreign body; but even where the tint is considerable, the amount of

coloring matter is frequently very small, and except for the purpose of the sculptor, their good qualities are as marked as those of the white marble. From this enumeration are excluded all the non-calcareous stones which in language of the artist, find a place among marbles, and all the calcareous aggregates of fossil shells and corals, which will be considered under the head of composite limestones.

Compact or Massive Limestone.—Under Simple limestones, we must include substances less pure than statuary marble; nor, in truth is it possible to draw a line of sharp demarcation between them and the magnesian or the composite limestones. We must certainly refuse the title of limestones proper to any stone containing less than half its weight of lime, or less than 90 per cent. of carbonate of lime; but within these limits it may be justly enough applied, especially if no single ingredient makes up the percentage. Where small quantities of different bodies, such as water, bitumen, iron, alumina, and magnesia together, constitute 5 per cent. of a mass otherwise consisting of carbonate of lime, its suitability for building purposes is so substantially identical with that of the pure carbonate, that it may be included in the same category.

Marble also, is rather an artist's than a chemist's or geologist's word, and may be applied to any limestone which, from its color and susceptibility of polish, is thought worthy to become the vehicle of the sculptor's art; so that marbles and limestones shade away into each other, and do not admit of being placed apart in separate groups. What an Italian, for example, might refuse to call other than limetstone, an Englishman might honor with the name of native marble.

There is this distinction, however, between the marbles in their best example and the limestones, simply so called in theirs; that the marbles are crystalline, and therefore granular in structure, are easily wrought, and take a high polish; whilst the limestones are non-crystalline or imperfectly crystalline, are not granular but compact in structure, are harder and less easily wrought, and do not take a high polish; but the hardest limestone is much softer than any building sandstone, and is more enduring as a building material for outer walls in a climate like ours than a marble would be.

No stone is superior to limestone for building with, where the conditions of climate are suitable. In Great Britain, however, the fine crystalline limestones or marbles suffer rapidly, if freely exposed. They are soluble to a minute yet appreciable extent in pure water, which their porosity allows readily to enter. They are still more soluble in water containing carbonic acid such as rain water or melted snow; and in water containing the products of combustion, viz:—carbonic acid, which are added to rain when it fall within the precincts of large cities, and especially when it runs over the roofs or walls of houses. They are liable to be splinted in cold weather by the freezing of the water retained in their pores, and are readily stained by the substances which enter these, and by the growth of the green *conferva* which cover read-

ily wet stones of all kinds. For sculpture, accordingly, to be exposed to all weathers, whether statuary or fine carving, they are unsuitable in climates like our own; but for ordinary building purposes, the marbles especially the darker ones would be suitable enough; and the non-crystalline or compact simple limestones are extensively employed all over the world as building stones.

Oolite or Roc-stone Limestones. One of the most extensively employed limestones in England, throughout the eastern and midland countries, is named oolite, literally egg-stone, from its peculiar structure. It consists of a multitude of spherical small grains, resembling in color and appearance of mustard-seed and adhering together like the ova of eggs which constitute the roe of a fish; hence its English name of roe-stone. The component particles vary in size from that of a pin head to small peas; but when they exceed the latter size, the resulting mass is termed Pisolite or pea stone. The oolitic globules appear to have been formed by deposition of carbonate of lime from solution in water charged with carbonic acid. Agitation of the water in which they have been deposited prevented for a time the carbonic from falling quietly as a sediment, so that it gathered round separate nuclei, each of which became converted into a calcareous globule. These globules afterwards settled down to the bottom, and gathered together into a mass, ultimately consolidating into an oolite or roc-stone. The nucleus of each globule appears frequently to have been a crystalline grain of carbonate of lime, round which similar grains clustered, as we see a minute snow-flake attract others to itself and become a large snow-feather—a spherical configuration not being attainable in the circumstances. Where the globules have been formed round particles of the same nature as themselves, they are solid, often radiated in structure, or simply compact; frequently they consist of consecutive layers covering each other like the different coats of an onion. A stone consisting of such solid globules, adhering together without interposed cement, or only with a calcareous one of the same composition as themselves affords the best building oolite, and may (as implied already) be as pure as the simple crystalline limestone. Such, for example, is the character of the oolite from Kelton in Rutlandshire, with which many of the public edifices in Cambridge, the modern portions of Peterborough and Ely Cathedrals, and some of the churches in London have been built.

In other cases, the component ovules of the oolite are hollow within, as if they had formed round a perishable nucleus, such as a particle of vegetable matter or a grain of salt, which has afterwards been decomposed and washed or dissolved away. Such a hollow globules occur in the well-known Bath limestone, employed largely in that city and elsewhere—Buckingham Palace London, among other edifices, being built of it. The same peculiarity of hollow ovules occurs to some extent in the most famous English oolite, the Portland stone with which St. Paul's Cathedral and a host of other churches and

edifices in the metropolis have been erected. When such ovules, by superficial disintegration, have their cavities laid open, these must afford a lodgment to water, dust and smoke, and lead to the disfigurement and decay of the stone. Many oolites, accordingly, are found to give way very rapidly when exposed to atmospheric action, partly from the peculiarity, but also from the interposed cementing matter wearing at different rate from the ovules themselves. Many limestones, in their general structure oolitic, contain also fragments of shells and non-calcareous matter. They thus approximate to the composite limestones, under which they will be referred to.

Magnesian Limestones. The term magnesian limestone is applied to a compound of lime, magnesia, and carbonic acid, which occurs both in regular crystals, like those of Iceland Spar. The lime and magnesia are united with the carbonic acid as carbonate of lime and carbonate of magnesia, and as these can crystalize together in any relative proportion, different magnesian limestones contain very unlike quantities of their common ingredients. That variety, however, is considered the most typical and characteristic which contains the two carbonates united in equivalent proportions, *i. e.* fifty parts of carbonate of lime to forty-two of carbonate of magnesia and forty-four of carbonic acid.

More than half this variety, which nearly resembles in composition the Bolsover limestone used in the construction of the Houses of Parliament, is thus carbonate of lime; and in all the varieties, it preponderates over the carbonate of magnesia. The majority of magnesian limestones contain in addition, small quantities of iron, silica, alumina, and water, like the simple limestones.

The fact of a stone of the class we are considering having been preferred for the Houses of Parliament, shows the high esteem in which it is held in England.

The "I Can'ts."

The "I can'ts"—are numerous and ubiquitous. Their numbers are astonishing. A curious statistician estimates that about one-half of the children born into the world are furnished by Nature with a remarkable lingual facility for the utterance of this brief and cowardly sentence. Neither time or experience enables them to abolish from their vocabulary these fatal words, and from the cradle to the grave, they drag a slipshod life spent in accomplishing nothing, from the fact that they lack the energy and will necessary to accomplish.

These human drags are recognizable anywhere under any circumstances, and in whatever garb. In the palace, but more often in the prison, especially in such enlightened States as ours, where prisons serve as a welcome refuge to many of them, who are too utterly worthless to get their own living, and therefore force their creditors to get it for them. And with this exception we can see no other humane purpose in a debtor's prison. Of the regal and ducal "I can'ts" history furnishes too many exam-

ples to need illustration at our hands. Oft-titled members of the order, of lower degree, the world is cursed with a less number than formerly, for the reason that the race is dying of mere insanity: hid in the great world among the masses. It is astonishing what a host of drones share the honey of the bees, gathering. Regarding everything they do as hardship, looking upon labor as an evil, it seems to be a sort of moral duty with such men to do as little as possible, and get all they can for it. "I can't" is their shibboleth and shield. Propose to them the accomplishment of whatever new work anything out of the beaten track, any little addition to what they *have done*, and see! how, like trained jack-daws—their *beak* fly open—without a moment's consideration of the possibility or desirability of the doing—and out it comes! like the "pr try Polly!" of a pet parrot—"I can't."

We have said—you may know them everywhere, in the legislative halls, on the battlefield, in the council-chamber, at the bar, in the counting-house, in the studio, at the bench or in the furrow, for they are spawned everywhere; and among all classes of indus-rials—merchants or mechanics, you may know "I can't"—as well by what he *does*, as by what he will not try to do; and a miserable—mumbling—mealy-mouthed—mountain-raising, and mole-hill moving mammy of a man will you find him in any of these pursuits. He is always for delay. "He has't time, or he has't tools; he lacks means; or he must have more help;" you "had better wait," or he knows "it is impossible;" anything rather than *do it*. "I'll try!" never comes into *his* head, as it did into Capt. Bragg's; to try being just what he wishes to escape from; while to say "I can't," is the easiest as well as the meanest method of accomplishing his desires.

"I can't," is a humbug and a nuisance, and society ought to make him sensible of the fact by kicking him without its pity. All things are possible—to God! and of the countless things possible to man, through the right use of the gifts He has bestowed upon him, not one in a hundred have yet been accomplished; myriads of failures resulting from the soulless efforts and combination blunderings of the inanimate host of "I can'ts." A boy, of sound body and mind, ought to be punished every time he used the phrase, by the adoption of which salutary corrective, the number of the men who will use it can materially be diminished—"Can't," is the most contemptible combination of letters known to the English scholar; and it may be safely assumed that neither Alfred, nor Arkwright; Milton, nor Maury; Washington nor Whitney; Girard nor Astor, nor any other among the glorious galaxy of determinate industrial stars, ever yet recognized the canting use to which the phrase is put by such as we describe.—*Hunt's Morals for Merchants.*

From the American Cotton Planter.
Independence of the South.

Dr. CLOUD—Dear Sir: The pleasure was granted to me to meet with, during my visit East-

ward and North westward, the following Editors of our Southern Agricultural papers: Sumner, of the South Carolina Agriculturist, Redmond, of the Cultivator, Cloud, of the American Cotton Planter, Boswell, of the Tennessee Farmer and Mechanic, and Byram of the Valley Farmer. These five writers with Nelson and Peters, form a galaxy of writers able to do good and true work, could we not enlist the South into the work. The above named papers are at my left hand, a part of which I am a subscriber to, and a part is very kindly presented to me. I cannot tell you which is which, because I prize one and all, and hope there are many men South who will take the 5 and add thereto that capital paper, Farmer and Planter, which has battled so earnestly for my native State, published by Seaborn, one who stands at least equal among his fellows in Pendleton, S. C. The Soil of the South is not to be ignored for it winds its way to the heart of one and all who subscribes. It is very true, we must have our favorites, if not on account of the Editors, yet because we love our friends. I, like others have my favorites, yet I wish every paper advocating our cause, so much success, that I dare not name my favorites, and plead for all yet I would not be one of those to give only faint praise.

I have had much satisfaction in riding and walking over the plantations and farms of Col. Eve, below Augusta Col. Redmond, of Augusta, Col. Peters, of Atlanta (near Calhoun, Ga, lies his farm,) and of Col. Carter, near Montgomery, Ala. We have nothing short of Colonels these days. Each of these gentlemen are doing much to add to the progress of the South. Col. Eve making mixed husbandry pay well, and no cotton, though on the rich lands of the Savannah river. His sales from Corn, Oats, Wheat, Hay, Pumpkins, Shucks, Wood, &c., exceed that of many of the best planters in Mississippi. Redmond, with his fruit culture, is adding to our independence and our comfort. Peters and Carter are raising rich stock, laying out rich magnificent orchards, growing, rich hogs, rearing stock that no man can now for a moment deny, that mules and hogs can be reared—if so visit Carters; if you desire to see orchards that are orchards, go to Carters' or to Peters', and if you would see Red Clover, Herd Grass, Blue Grass, Graziers "up to their hellies in clover," Cashmeres and Devons and Brahmins and Buckskins, why peep in at Peters', near Calhoun, Ga., where you will see a garden to brag over, a wheat field like unto the west of Pennsylvania and—and what have you not got, my friend, Richard Peters?

My friends will pardon this enthusiasm.—You all know as well as I do, the great want of such men, who, with Dr. Parker, of Columbia, S. C., are proving to you, that we, as Southern planters, can be, which we ought to be, and I pray God we may be, truly independent. Were you to mix with the Northern people as I have done—were you to hear them “damn the Abolitionists, they have injured the business of Cincinnati, to hundreds of thousands,” you would see plainly that we had really hosts of friends among Northern men—*many*, because *interest* prompts; you would feel far more desirous to see our loved land fully developed to its best interest. I unhesitatingly aver that we are safe, so long as we take care of ourselves. And I hold it a duty to say thus much politically, and no more, let us stand shoulder to shoulder in developing our own resources, make our own supplies, be independent, asking nothing and giving nothing, holding our own, and not grasping at that of others. Such men as I have taken the liberty to name deserve the praise of the whole South, and better put their names on the free list, than your wishy-washy political papers.

Yours truly, M. W. PHILLIPS.

Edwards, June 23, 1856.

Good Rules for Farmers.

We take the following rules from a valuable exchange, and most heartily do we recommend them to our readers. They should be printed on neat cards, and hung above the mantel-pieces of farmers, where they would continually admonish and interest. System, and the more strict the better, is the secret of success in all business. These rules furnish a brief but complete system; let them be pursued, and the result will not fail to justify the claim we urge for them.—ED. UNION ARTIST.

1. Good implements of husbandry, and plenty of them, which should always be kept in perfect order.

2. Deep plowing and thorough pulverization of the soil by the free use of the harrow, drag or roller.

3. An application of lime, marl or ashes, where calcareous matter or potash may not be present in the soil.

4. A systematic husbanding of every substance on a farm capable of being converted into manure; a systematic protection of such substances from loss by evaporation, or waste of any kind, and a careful application of the same to the lands in culture.

5. The draining of all wet lands, so as to re-

lieve the roots of the plants from the ill effects of the superabundance of water—a condition equally pernicious as drouth to their healthful growth and profitable fructification.

6. The free use of the plow, cultivator and hoe with all row-cultured crops, so as to keep down, at all times, the growth of grass and weeds—those pests which prove so destructive to crops.

7. Seeding at the proper time with good seed, and an equal attention as to time with regard to the period of working crops.

8. Attention to the construction and repair of fences, so that what is made through the toils and anxious cares of the husbandman, may not be lost through his neglect to protect his crops from the depredations of stock.

9. Daily personal superintendence, on the part of the master, over all the operations of the farm—no matter how good a manager he may have, or however faithful his hands may be, as the presence of the head of a farm, and the use of his eyes, are worth several pairs of hands.

10. Labor-saving machinery, so that one may render himself as independent as needful of neighborhood labor, as a sense of the comparative independence of the employer upon such labor begets a disposition of obedience and faithfulness on the part of the employed.

11. Comfortable stabling and sheds, for the horses and stock; all necessary outbuildings, for the accommodation of the hands and protection of the tools and implements, as well as for the care of the poultry.

12. Clover, and other grasses, to form a part of the rotation of crops, and these to be at the proper periods plowed in, to form a pabulum for succeeding crops.

13. The clover field to be either plastered or ashed each succeeding spring, one bushel of the former and six of the latter per acre.

14. To keep no more stock than can be well kept; but to be sure to keep as many as the farm can keep in good condition, as it is wise policy to feed as much as possible of the crops grown on the farm, and thus return to it that which has been abstracted from it.

15. To provide a good orchard and garden—the one to be filled with choice fruits of all kinds, the other with vegetables of different sorts, early and late—so that the table may at all times be well and seasonably supplied, and the surplus contribute to increase the wealth of the proprietor.

Sweet olive oil is a certain cure for the bite of a rattlesnake. Apply it internally and externally,

From the American Cotton Planter.
To the many Correspondents of M. W. PHILIPS.

D^R. CLOUD—*Dear Sir*: Before this reaches you I shall be engaged in an entire new work though really, in my humble opinion, only a higher, more exalted position as a laborer. I have for many years been actively engaged, as you know, in adding, with my ability, to build up our country and aid our race—as an agriculturist. I do not mean to stop that, but advancing upward, whilst I keep up this.

I will leave my home for weeks at a time to engage in the work of arousing man to his duty, in reference to his right master and his fellow man. To explain, my business will be to raise funds to send the preached word and the Bible to those in the South who have not had access thereto. Whilst I am absent, letters will accumulate at my home as for the past seventy five days, but they will be answered at each return. And I thus notify such, if answers be not prompt, they may know I am absent.

My travel will be over Mississippi, and whilst my business will be to beg men to be earnest in their own hearts, and to contribute of their means to send the word of Life to the needy, I will have a good opportunity to see our agriculture, to make the personal acquaintance of our planters and farmers, and thus fit myself to be more useful. Thus striving to labor, I earnestly request of our editors and the progressive—reading planters and farmers—that they speak a good word for the cause. If I have helped you, dear reader, when I have labored for the agricultural cause, may I not ask you for some help in my new branch of labor. Remember, I only ask for the cause, believing in truth it is more exalted than the agricultural part, but, a part of the same cause. Address as usual, and oblige

Yours, M. W. PHILIPS.

Edwards. Miss July 5, 1856.

Will all agricultural editors with whom I correspond please notice this?*

M. W. P.

*We will, with pleasure, friend PHILIPS—ED. & F. P.

United States Agricultural Society.

The Fourth Annual Exhibition of the United States Agricultural Society, will be held at Powelton, (Philadelphia,) on Tuesday, Wednesday, Thursday, Friday and Saturday, October 7th, 8th, 9th, 10th and 11th.

The First Exhibition of this Society, held at Springfield, Mass., in October, 1853, was devoted exclusively to an examination of Horses; at Springfield, Ohio, 1854, Cattle alone were

exhibited: at Boston, 1855, all departments of Farm Stock—Cattle, Horses, Sheep and Swine—were shown.

The Society, encouraged by past success, and by the approbation of the Agricultural community, now propose to offer premiums, not only for Domestic Animals, but also for Poultry, and the Products of the Fruit Garden, the Grain Field, the Vineyard, and for Agricultural Implements and Machinery.

Premiums from \$25 to \$400, amounting in the aggregate to over \$12,000, will be offered for the various classes of Domestic Animals, Fruits, American Wines, Grains and Agricultural Implements and Machinery.

A local Committee of forty citizens of Philadelphia, representing the various branches of industry, has already been appointed to co-operate with the officers of the Society, in perfecting arrangements for the Exhibition; and \$15,000 have been guaranteed to meet expenses. This material aid, coupled with the excellence of the selected location, and the large amount of Premiums offered, induces the expectation that the Exhibition of 1856 will be superior to any of its predecessors.

Favorable arrangements for the transportation of Stock and other articles, will be made with the various railroads.

The List of Entries, the Awards of Premiums, and the Proceedings will be published in the Journal of the Society for 1856.

The Premium List, with the Regulations and Programme of the Exhibition, will be furnished on application to Mr. John McGowan, Assistant Secretary of the United States Agricultural Society, 160 Chestnut street, (Rooms of the Philadelphia Agricultural Society) or by addressing the Secretary, at Boston.

MARSHAL P. WILDER, President.

WILLIAM S. KING, Secretary.

June 1st, 1856.

Improved Methods in Culture, Economy, etc.

In our leader for this month we have given some account of a few of the improved tools now coming into use, and by the economy consequent upon the introduction of which, the cost of farming is to be materially improved.

What farmer at this time can afford to pursue his calling with the tools and fertilizers of ten years ago? What farmer without the improved tools and fertilizers, can compete with his more enterprising neighbors? Who can farm 50 acres with the best results, with five hands, without the adoption of the best methods, which includes improved tools and fertilizers? What farmer, with 100 acres, has team enough to cart and distribute 50 loads of barnyard and stable manures per acre? and what farmer can procure such a quantity as often as required? Who does not know, at this day, that such a quantity may be used with greater profit than a less quantity? And all should know that the most profitable results are only attainable by furnishing the necessary amount beyond the manures produced on the farm, by the use of artificial fertilizers. Who does not know that soils may be gradually deepened by

deeper cultivation and consequent admission of atmosphere? And all should know that deepened soils require less manure to produce an equal amount of crop, or with the same amount of manure produce an increased amount of crop.

These are positions which we claim as truths, established beyond a question, and old and industrious farmers may be found in every county, who have failed to render themselves independent even after an amount of exertion through life which has deformed their persons and impaired their general health, while others, who have adopted a more judicious course, are occasionally to be met with who have gained a competency with less animal and more mental exercise.

It is no argument against the adoption of improved methods, because an occasional experimenter, without the proper exercise of judgment, has adopted some of the improvements and applied them injudiciously. Do not injudicious men do the same in all callings? Do not some merchants fail while others succeed? Is this not true of every walk of life? And if so, why should a few failures, among men wanting the tact to adopt the truths as a whole, and not in part, be quoted to settle a great principle. Look among the old style farmers in any county, and inquire how many industrious men have failed and passed out of existence, leaving indigent families, and you will find them more numerous than the unsuccessful, among those who have attempted to improve their condition by adopting the supposed truths ascertained by others.

Instead of asking what our grandfathers did as farmers, let us look forward to what our grand-children may probably do. At least all must admit that the last generation has enabled us, by their instruction, to comprehend the use of iron plow-shares, under-drains, sub-soil plows, and a variety of improved tools and fertilizers. Should we not do the same for our children, by adopting improvements made by others, and thus render the knowledge general, even if we refuse to be experimenters ourselves? Is it not the first duty of man to progress? And who is free from this obligation?

In view of these facts, we propose to point out some of the ascertained truths and urge their adoption.

First, as to the general truths in the preparation of soil. Many soils are improved by turning over to great depths; indeed, we have known practically but one exception, and that had a sub-soil filled with copperas, made by the decomposition of sulphuret of iron: but let us admit, for the benefit of those who disagree with us in this proposition, that the surface-soil should only be turned over to the depth which its blackened appearance will indicate as surface-soil, still this should not deter us from loosening the sub-soil without elevating it, and this may be done with the Lifting Sub-soil Plow, and when so loosened, Nature's laws will soon blacken and improve such soils, rendering them fit for elevation, and thus deepening the surface-soil. But, says the farmer of

small capital, what will be the effect on immediate crops? This is a fair question, and we will answer it. The disturbance of the sub-soil in place, if not surcharged with water, will be to free from the grains of sand, clay, etc., those ingredients required for the inorganic constituents of plants. How came the surface soil to differ from the sub soil? Were they not once alike, and will not like causes produce like effects? Let in the air and warmth, and the sub-soil must be converted by its own chemical changes into just such a soil as rests above it. Will not roots penetrate it and there decay? Must not this add organic matter and so supply the only difference between sub and surface-soils? But will any of these ingredients be supplied to current crops of the season? We answer yes, and do so from frequently repeated experiments. Sub-soil every other land in a field intended for corn, and leave every other land without subsoiling, and you will find the same difference the first year that James Campbell, of Weston, N. J., ourselves, and hundreds of others* have found, in favor of subsoil plowing. Our former volumes contain many practical experiments, with exact results, all of which are substantially alike. Thus Mr. Campbell found, that while the number of ears of corn to the hill were alike on the sub and surface-soil plowed land, still the size of those gathered from the sub-soiled portions was so much greater, that 85 ears filled the same basket which held 113 ears from the portion not subsoiled. A similar difference will exist in all crops even the first year, while the crops for all time will continue to show similar differences in favor of the sub-soiled portions. All these truths will be self-evident to the reflecting mind. Were not all soils originally made by the debridation of the rocks? Were not heat, air and moisture, the agents to bring about such changes, and may not every particle of the soil as it now exists, be viewed as a rock requiring further division to expose its hidden treasures? Can these changes occur in a compact sub-soil, and if not, should it not be disturbed by deep plowing?

Beyond the advantages above enumerated, we may name as a consequence of full sub-soil plowing, the entire protection from drouth; for when the atmosphere enters a loosened sub-soil, it will part with its moisture upon the surfaces of particles colder than itself, and we have only to observe the outside of a pitcher containing cold water, to see the same process going on. The temperature of disintegrated sub-soils are materially increased by the moisture condensed on the surface of particles, as well as by the new chemical changes which are induced thereby.

All this can be readily accomplished at this time, by the use of the Lifting Sub-soil Plow, and without the expensive team required to the old style sub-soil plows. Where land is prepared by the Digging Machine, the surface and sub-soil plowing are both done at one op-

*We once made a similar experiment. The difference in the sub-soiled and unsub-soiled lands was remarkable.—Ed. F. & P.

eration, to a depth of sixteen inches. The same *rationale* will readily explain the advantages arising from under-draining; and, indeed, in soils requiring under-draining to get rid of excess of water, sub-soil plowing is of no use, until after the under-drains are finished.

[Working Farmer.]

From the Southern Planter.
Negro Cabins.

EDITORS SOUTHERN PLANTER:—I make no apology for offering you a few hints upon the construction and management of "Negro Cabins," as the subject is an important one, and the ideas I offer chiefly derived from a medical friend, in whose sound judgment both you and myself place great confidence.

The ends aimed at in building negro cabins should be: First, the health and comfort of the occupants; Secondly, the convenience of nursing, surveillance, discipline, and the supply of wood and water; and Thirdly, economy of construction.

Of course, the convenience of locality must be judged of by the builder. I only propose to consider the subject in its economic and healthful aspect, and to this end recommend that negro cabins should be built of plank, have large glass windows and good chimneys; should be elevated at least two feet above ground, and never placed within less than 75 or 100 yards of each other. When inch plank is not worth above \$1 25 per hundred feet, I consider the plank house cheaper than either log or masonry. At this price, the cost of plank for a house 16 feet square will not exceed \$15, for which sum I would not furnish, hew, haul and put up logs to build a house of the same size. The planking is put on up and down, and I use a double course of planking instead of narrow strips; this I find makes a very comfortable cabin both for summer and winter. If the builder choose to incur a slight additional expense, and should dress the outer course and give it a coat of paint, this, with a projecting eave and some cheap ornamental cornice, makes a very pretty house, and obviates the necessity for sticking the negro cabin out of sight of the mansion.

Plank houses are considered by Physicians as more healthy for negroes than log, for the reason that there is constantly accumulating in and around the negroe's house a vast quantity of animal matter in the form of excrements and emanations from the human body, which has fewer places of lodgment and is more easily removed from the plank than the log house.

To form an idea of the *strength* of this matter, you have only to call to mind the odor of a sweating negro, or the stench which pervades a room in which several of them are sleeping. The Doctors tell us that these smells are clouds of animal matter, absolutely capable of being weighed and seen as well as tasted and smelt, and are constantly collecting in the walls and under the floors of negro cabins, and there rot and *stink* as any other putrescible matter—(you must excuse an unrefined word now and then, for to tell the truth, I can't find a synonyme for that word which would at all convey the idea I intend.) This is beyond doubt the frequent cause of disease, and should be carefully provided against, and hence I recommend the elevation of the floor above the ground, with a view to the frequent cleaning up of this accumulated filth. On my own farm a few years ago, typhoid fever, a disease until then unknown upon it, broke out in an old negro cabin, closely underpinned, and which for many years had been used as a negro house. My family physician advised me to tear away the underpinning and have all the filth cleaned up. In doing so, I found an accumulation of foul matter in layers almost denoting the number of years it had been collecting, which required six loads of a common cart to haul off, and from which came a stench equal to the concentrated essence of all bad smells put together. I would not if I could give you or any other friend of mine an idea of its foetidness. I tore down the house and found the old logs impregnated with foul smells, which continued in them long after they were exposed to winds and rains. The old house was like the "vase in which roses have once been distilled," except that it wasn't exactly the "scent of the roses" that hung round it still.

The floors of negro cabins should be of plank rather than dirt, and should be dressed and joined, but not nailed down, that every plank might be taken up occasionally and cleansed of any filth that may have settled upon them. Lime and other disinfecting agents should be freely used. Negroes should be well supplied with light. They "prefer darkness to light," and unless watched will exclude the light entirely from their houses.

Their houses should be provided with large glass windows, and when a pane is broken they should be made to replace it rather than fill its place with old rags. Light and air are necessary to the proper making of blood; and negro women and children, who spend so much

time within doors, should be compelled to enjoy both those elements. They have to be forced to it, for in sleeping a negro will cover his head if his feet freeze, and thus breathe over and over again the same air, charged as it becomes with carbonic acid and exhalations of the body, and deficient perhaps in oxygen, the element so needful in making good arterial blood. It is considered by medical men, I believe, that this bad elaboration of blood develops lurking scrofula and even generates it.

Glass windows enable the negro to do much work "in doors," and are surely more convenient than a lightwood knot in enabling the physician or nurse, in case of sickness, to examine the patient or minister to his wants. I think a doctor has just cause of complaint when forced to burn a negro's eyebrows off with a pine torch before he can get a sight of his tongue at mid-day.

Negro houses should be provided with chimneys that don't smoke. Air-tight stoves are liable to give negroes cold from the extremes of temperature they produce and are objectionable in that they give no light. The Franklin stove is well adapted to negro cabins, and was used by yourself while you lived in Albemarle. Any thing is better than a smoking chimney. On many of our Virginia Farms, I doubt not there is lamp black enough accumulated in the breathing tubes of the negroes during the night to black the master's boots in the morning.

Cabins should not be placed at a less distance than from 75 to 100 yards from each other, for the reason that it is highly probable that infectious diseases, such as scarlet and typhoid fever, measles, whooping cough, and even small pox may not be communicated at that distance.

Yours truly, R. W. N. N.

Albemarle, Feb., 1856.

From the Boston Cultivator.
Peruvian Guano.

MESSRS. EDITORS: In the Mark Lane Express, for 21st April, there is the commencement of a long and highly scientific article on "Peruvian Guano, its history, composition, and fertilizing qualities, with the best mode of application to the soil, by Professor Nesbit," from which I clip the following "general rules for using guano," and request their republication in the Cultivator, for present instruction and future reference:

"1st. That guano is best applied in damp or showery weather. 2d. That guano should not generally be put on grass land in the spring later than April. 3d. That when guano is applied to arable land, it should immediately be mix-

ed with the soil, either by harrowing or otherwise. 4th. That when the wheat is sown very early in the autumn, a less than usual amount of guano must at that time be applied and the rest in the spring. The wheat, otherwise, might become too luxuriant, and be injured by subsequent frosts. 5th. That guano, and artificial manures in general, should be put on the land only in quantities sufficient for the particular crop intended to be grown, and not with the intention of assisting the succeeding one. Each crop should be separately manured. 6th. That guano, before application should be mixed with at least from five to six times its weight of ashes, charcoal, salt, or fine soil. 7th. That guano should on no occasion be allowed to come in direct contact with the seed."

In a note at the bottom of one of the columns of the "Express," appears the following remarks by the Professor:

"Some varieties of wood ashes, which contain a considerable amount of free alkali, are not suitable for mixing with guano, as they liberate the ammonia. This easily may be shown by mixing a shovel-full of the ashes with the same quantity of guano. If a strong ammoniacal odor be immediately perceived, the ashes are not fit to be mixed with the guano."

Now, this may be true according to the book but I wish that some common sense answer could be given to the following statement, which I copy from the Gardener's Chronicle for the year 1844, that appears to carry conviction upon the experimental face of it. The trials were made on an exhausted soil, and were conducted in the fairest possible way:

| | |
|--|-----|
| Exp. 1. No manure on turnips; yield, | 88 |
| 2. Horse-dung 4 cwt., lime half a bushel, the lime slaked and mixed six weeks before, for the purpose of <i>driving off</i> the ammonia, | 462 |
| 3. Horse-dung 4 cwt., sulphuric acid 2 lbs., applied six weeks before, for the purpose of <i>fixing</i> the ammonia, | 445 |
| 4. Horse-dung 3 cwt., composted six weeks, | 392 |
| 5. Horse-dung 6 cwt., as above, | 429 |
| 6. Horse-dung 8 cwt., as above, | 518 |
| 7. Horse-dung 5 cwt., burnt to ashes, with free admission of air. | 429 |
| 8. Horse-dung 5 cwt., burnt with little air, until the vegetable matter becomes charcoal, | 445 |
| 9. Horse-dung 5 cwt., sulphuric acid 5 lbs., mixed with the dung, and then carbonized like the last, | 417 |
| 10. No manure, | 70 |

It is added, "If these results can be relied upon, we shall come to the conclusion, first, that 5 cwt. of dung, when burnt, is as good as 6 cwt. of raw manure; and second, after all that has been said about the importance of ammonia in manure, the crops are as good where the principle is driven off, as when it is retained by fixing." Now, this was known and published twelve years ago, and yet we find Professor Nesbit still professing the exploded doc-

time of the great value of ammonia in manure, and the care necessary, that it might not be dissipated by any mixture of free alkali!

Messrs. Editors, I was yesterday reading in an old book the following axiom: "A simple creed the best;" and may I be allowed to express my firm belief, that neither alkali nor acid—ammonia nor oxygen—contain the "food of plants," that being carbon, and carbon only, in which term humus is of course included; and by the means of this simple creed, I am enabled to understand why there is so very small a degree of preference to be given to unleached ashes to those that have been drained of their alkali, in whatever state or by whatever name; carbonic acid gas being heavier than atmospheric gas, and so, descending to the earth, instead of flying off; thus speaking very plainly, all that is necessary further to say on the subject.

R. ATTLETREE.

From the Soil of the South.

RECIPE FOR SPAYIN IN HORSES.—Two table-spoons full of common salt dissolved in one pint of water, to which add two table spoons of cayenne pepper powdered fine, and half a pint of lard; all to be put in a pot and simmered slowly, until all the water has been evaporated; then add one ounce of hartshorn and one ounce laudanum, all well mixed and put into a bottle and well corked. Rub the affected knee three times a day with the mixture, and you will find one bottle will generally effect a cure. This will also cure the swinney. G.

The above is strongly endorsed by one who has tried it.—ED. SOIL OF THE SOUTH.

TO DESTROY VERMIN.—The celebrated Raspail, well known as one of the best French chemists, has given an important recipe for destroying vermin on animals, and also on plants and trees, important, at least, if true. The process he recommends is to make a solution of adoes—a quarter of an ounce of that gum to two pints of water, and, by means of a large brush to wash over the trunks and branches of trees with this solution. The simple process says Raspail, will speedily destroy all the vermin on the trees, and will effectually prevent others from approaching. In order to clean sheep and animals with long hair, they must be bathed with the solution, or be well washed with it. Raspail mentions several trials he has made with the mixture, all of which have been attended with the most complete success, and he recommends it very strongly to general use.

Money skillfully expended in drying land by draining or otherwise, will be returned with ample interest.

To cure scratches on a horse, wash the legs with warm soapsuds, and then with beef brine. Two applications will cure in the worst case.

Experiments show apples to be equal to potatoes to improve hogs, and decidedly superior for feeding cattle.

Rats and other vermin are kept away from grain by a sprinkling of garlic when packing the sheaves.

Hay-Covers.

A good set of hay-covers will save twice their cost every season, and with due care will last a dozen years. Two months from now farmers in the vicinity of New York will be cutting their hay crop, and not one in ten has such a thing as a cover for his cocks by which he can effectually secure the hay against injury from a sudden shower. Now is the time to get the hay covers. Do you know how? Perhaps not. Then we will make this little item worth more to you than ten times the price of our paper. Buy a piece of stout, coarse, brown cotton sheeting, a yard wide or more, and tack it upon the sunny side of a plank fence, or broadside of the barn, and paint it with the following composition:—Linseed oil, one gallon; beeswax, two pounds—boiled together, to which add a quart of Japan varnish. Dry two days and cut the cloth into squares, and to each corner attach a round stone of six or eight ounces weight, sewed in a bag, fastened to the cloth by a string a few inches long, in such manner that the weight can be easily taken off for convenience in packing away the covers when out of use. One of these thrown over a cock of hay hastily thrown together, will keep it quite dry in case of a sudden shower.—A large cover for a waggon load or unfinished stack of hay or grain will be found one of the most useful implements of the farm. It is surprising that every man who hauls hay to market does not keep such a useful thing.—*Ex.*

New Paint—Valuable Discovery.

Water lime, (hydraulic cement) mixed with oil in the same way as Blake's Ohio paint, or any of the several mineral paints lately brought into use, has lately been discovered to be equal to any other substance for painting walls, roofs, floors, fences, or any other work; while in point of economy it is as one to eight or ten.—The discovery was accidentally made by Mr. John Harrold, of Hempstead Long Island. He sent a man into a store room to get some of the mineral paint to mix for painting a floor, and the man took of the cement barrel, mixed and applied it before the mistake was discovered.—It was put on in the evening, and the next morning found to be as dry and hard as stone. Mr. H. then tried it upon fences and roofs with like success, mixed both with fish oil and linseed. To give it severe test, he then mixed it with fish oil, and painted two oil casks, upon which it dried quickly and adhered firmly. Farmers, try it. It is undoubtedly worthy of attention.—*Ex.*

THE VALUE OF BONES.—The American Farmer says that every forty bushels of bones dissolved in sulphuric acid, (about one-third weight of the latter, diluted with water,) are equal to two hundred pounds of guano.

BEES.—To stop bees from fighting and robbing one another, break the comb of the robbers, so that it will run down among them, and they will go to work at home. I had two hives of bees destroyed this month by being robbed, and should have had another robbed if I had not received the above information.—*Ex.*



The Farmer and Planter.

PENDLETON, S. C.

Vol. VII., No. 9, : : : September, 1856.

Bordeaux Peach.

To the Ladies at Mr. R. A. Maxwell's we are indebted for their kind attention in sending us a basket of this excellent peach, which we consider equal if not superior to any other in our section. We have heard it spoken of by some as a coarse grained and very common peach. Such persons must be greater epicures in fruit than we are. We know that the tree to perfect its fruit well requires a full exposure to the sun and other attentions which it receives from our neighbor, Mr. Maxwell. Place it in an orchard surrounded and shaded by other trees and the fruit will be watery and insipid, if it does not rot before maturing. From the peculiar growth of the Bordeaux peach tree, we conclude, in France, from whence the parent tree was imported many years since by our old friend, the late Samuel Maverick, it is, or was originally, trained to a wall, which is not an uncommon practice we believe in that country.

To Mrs. Burns, also, we are indebted for some very fine peaches, a large white cling and free-stone, names not known, with a large and excellent Indian peach. We have an uncommon fruit year, especially of Nectarines, Apriots, and Plums, which have been more abundant than we have ever seen before.

Turnip Seed.

To our much esteemed friend, Judge Evans, of the U. S. Senate, we are under many obligations for his continued attentions in forwarding us several papers of Patent Office Turnip seed, which came to hand just in time for the present season. And to Col. A. P. Calhoun many friends are greatly indebted for a supply from a bushel of turnip seed sent us for distribution—a God-send to the people for many miles round, as seed were uncommonly scarce throughout the country. Col. C. informed us, that after allowing his neighbors to gather what they desired he saved between two and three bushels of well cleaned seed. We would not advise our readers to follow the practice of saving turnip seed from the patch when they have remained in the ground through the winter, as it is believed that such a course will cause the turnip to deteriorate.

The Pendleton Farmers' Society.

We much regret that the Committee appointed at

our last anniversary meeting to make out a new list of premiums for our next anniversary, to be held on the 2nd Thursday, and day following, in October, have not yet furnished us with their list. We hope yet to receive it in time for our October number, but if not, we are requested by the President, Hon. R. F. Simpson, to say that if no list is furnished the old one (that for last year), will be adopted, and that a Committee on discretionary premiums will be appointed to attend to every thing not enumerated in the list. We trust that none will stand back in consequence of the neglect of the Committee, to perform their duty, but that all will come forward with whatever they consider worthy of exhibition. The Ladies, especially, are invited to make a display of their pretty as well as useful things, which the gentlemen are so fond of viewing and handling, and we can promise them that ample justice will be done to all. And, gentlemen, bring up your stock of every kind, your machinery, agricultural implements, the products of your farms, orchards, and every thing else calculated to interest the members of the Society and perpetuate its usefulness. Competition is said to be the life of trade. It may with as much propriety be said to be the *main-spring* to the agricultural advancement of a community. Let us therefore honorably compete with each other, not for a trifling pecuniary consideration, but for the purpose of advancing the great agricultural and kindred interests of our country.

It is expected that the anniversary address will be delivered by the President on the first day, *Thursday*. The show of Animals, &c., on *Friday*. Committees will be appointed and notified by the President to report on the various subjects assigned them, in time to make out their report, which we confidently hope none will neglect to do.

State Agricultural Society of South Carolina.

The attention of our readers is called to notices of the time of holding the first Anniversary meeting of this Society, with the inviting list of premiums offered, to be found on our advertising sheet, which we have been compelled to enlarge to enable us to get it on. This addition to our usual amount of matter, will cause our paper we fear to appear somewhat later in the month than usual, but it is important to have the list out in time for our readers to make preparations to attend the meeting. Will all do so with every thing they may have worthy of competing for the premiums so liberally offered?

Family Messenger.—We some time since refused to exchange with this *dirty abolition* sheet for which the editor, whom we suspect must contain some of the "black amalgam" in his own composition, calls us every thing contained in the vocabulary of his Billingsgate. We should be honoring this fellow too much in taking up space in our paper to reply to; or notice him, except to say that we consider him a *liar*, a

low blackguard a poltron, and a little barking puppy without teeth.

We have, for some years back, been exchanging with most of the Agricultural papers of the East, North, and Northwest, the Editors of which, we have found to be gentlemen, and of whom we have had no occasion to speak unkindly. But this fellow is "outside of the gate," and may abuse us to his black heart's content. We promise him no farther notice.

Communications.

Several have been received, too late, we regret to say, for our present number—shall appear in our next. Our fair correspondent, "Lucy," has brought out already two on the subject of making and saving bacon. Will others follow suit.

A lady desires information on Strawberry raising—how to prepare the beds, when to set out the plants, and the best variety. We know none who are posted in the business can refuse to comply with the request. Let us hear from you in time for our next number.

Gravel in Horses.

A subscriber asks for a remedy for "Gravel in horses." Who has one? A neighbor of whom we have enquired, and who is considered one of our best horse doctors, (we know he is one of the out-swapping-est men just about here), has shown us a small plant, that is very common in our woods, called by the different names, Pipsisway, Wild Arsenic, Winter Green, Rheumatic weed, Princes Pine, &c., (*Pyrola Umbellata*,) which he says is a sovereign remedy.—Make a moderately strong tea of the plant and give as a drench one quart at a time, or sprinkle on cut food and bran, and repeat if necessary. This plant is a powerful diuretic and will in all probability prove to be a good remedy.—The tea of water melon seed, is sometimes given, as is also a decoction of the root of the "Queen of the Meadow," "Gravel Root," (*Eupatorium purpurium*.)

Weeds.

As this is the season of the year for the growth of weeds, it may not be unimportant to enquire whether they serve a noxious or a beneficial purpose on land, or whether it is the policy of the farmer and planter to eradicate or encourage the growth of them. We have from long experience and observation formed a decided opinion against them. We know that a difference of opinion prevails among some farmers, and it is for the purpose of ascertaining the truth, that we institute the present enquiry, and invite discussion on the subject.

The epithet *noxious*, has always been applied to them. The prevailing opinion, therefore, from the

universality of this epithet, has been that they are hurtful either to the land or to the crop. That they are injurious to both, we firmly believe, and that they not only increase the labor of cultivating the crop, but they impoverish the land and present a most formidable obstacle against any judicious rotation for the improvement of it. On this latter point we are aware that a diversity of opinion exists. It is believed by some that they return more to the land than they abstract; and, therefore, the growth of them should be permitted and encouraged. But we think there can be no more fatal error, and that they are the principal impediment in the way of good culture.

The practice of other countries more advanced in agricultural improvement, is decidedly against the growth of weeds. The Chinese wont suffer them to grow on their land. They eradicate not only the weed, but the seed of them—they wage a war of extermination against them; and although nature is always prolific in the propagation of all her progeny, and more especially of the seed of weeds, multiplying them by the million and scattering them broadcast over the face of the earth, the Chinese farmer perseveres until their land is thoroughly cleansed and free from their pollution.—They prefer that the land should be occupied by some plant that will contribute to the support of animal life. In fact the crowded population of that great empire cannot spare a foot of land merely to produce useless and noxious weeds.

The practice of England, also, is against the growth of weeds. Their climate is very humid, and therefore, very friendly to their production; but from a very early period in the history of agriculture in Great Britain, their farmers adopted the system of naked or dead fallow in order to destroy weeds and to prepare their land for the reception of the seed of their crops. The system of naked or dead fallow was the cultivation of the land for twelve months previous to sowing the seed or planting the crops, to cleanse the land from the pests that infested it. It was attended with great loss of labor, as nothing was grown on the land the year of the fallow. Within the last half century, this system gave way to the introduction of *fallow crops*, instead of the naked fallow, which was a saving of millions of pounds sterling to the profits of agriculture, because they realised the fallow crop as a clear gain; and it also had the same effect in cleansing the land by destroying the weeds and preparing it for the reception of the main crop. A nobleman, by the name of Townsend, was the author of this great revolution in their system of agriculture. The fallow crop he introduced was the turnip; and hence the *sobriquet* of Turnip Townsend was given to him in ridicule. But he was a public benefactor to his country—the old system of naked fallow fell dead, and the fallow crop was generally adopted throughout the kingdom. The same object in both systems was gained, to wit: the destruction of weeds which was regarded as pests to the land and the crop.

What great results sometimes flow from such simple causes. The English people little dreamed that this retired country gentleman whom they ridiculed, was the author of a system which has created a complete revolu-

tion in their agriculture, and has been one of the causes incidentally of their great national prosperity; for it was the foundation of their sheep husbandry, and by consequence of their gigantic system of manufactures, and of their foreign commerce.

But to return from this digression. The first object of an English farmer is to cleanse his land, which was as well done by the fallow crop as by the naked or dead fallow. Their next object is to make their land rich by manure; and their third object is to drain it effectually. These three objects constitute the principal elements of English husbandry, and in all these respects they are very far ahead of us. When we compare the production of their lands with ours, we ought to blush at the difference. Mr. Colman, of Massachusetts, in his agricultural tour through Great Britain, states that the average of the wheat crop is 28 bushels, and that it had increased in the last half century, from 16 to 28 bushels, by means of sub-soil plowing, and under ground draining. How different is our practice, and how vastly different is our result?

In the first place, we neither attempt to cleanse our land from noxious weeds, nor adopt a fallow crop for that purpose, except in rare instances where cotton, which is a good fallow crop, precedes wheat or other small grain. Our usual fallow crop is Indian corn, the culture of which makes it a very imperfect fallow or cleansing crop. It is usually "laid by" in July, time enough for weeds and grasses to come up and perpetuate themselves by maturing their seeds. In this foul condition is our land seeded in small grain and usually with a single and very shallow plowing; and when the spring comes, myriads of weeds come up and contend with the crop for subsistence. Sometimes when the season is propitious for their growth, they over-power the crop, and always they extract the nourishment that ought to go to the crop.

But the advocates of this slovenly and ruinous system, contend and console themselves that if they have a lean crop of wheat or other small grain, they have a rich crop of weeds to return to the land. Perhaps if it were done at the proper time, always in the fall before maturing their seed, the land would be benefitted to some extent but not to the amount of the enormous drain they have taken from the land. But this involves a consideration or rather a comparison of two opposite systems of farming as practiced in our own country, which we have not time to do now, but will endeavor to present in our next issue.

WHEAT MUSH.—Take fresh, clean wheat, grind it coarsely in a hand-mill, (the same as a coffee-mill, but a separate,) stir about a teacupfull into a quart of water, add a little salt, and boil fifteen or twenty minutes, stirring all the time.—Eat it cold, with rich country cream, and you have a delicious and wholesome supper.

In feeding with corn, sixty pounds ground goes as far as one hundred pounds in the kernel.

Farmers, remember, it will cost less in the end to make a good than a poor fence.



Ladies' Department.

Sewing in Visiting Hours.

"Come spend the afternoon and bring your sewing."

So said our grandmother's when pine chairs stood in the parlor, and rag carpets or no carpets at all were the fashion. We seem to see her now,—the tall handsome woman of the olden time—the leading lady—the doctor's wife—the favorite of young and old the pattern wife and mother.

What! she sit during a long forenoon and listen to the idle chit chat of half a dozen callers, when Jimmy's new clothes suffered to be made and a basket of unfinished work sat on the table or stairs? Not she. No—not even if she lived in this excessively refined age and consented to receive callers in the morning. If the neighbors went to see her they received the heartiest welcome imaginable:—were told to take off their things and stay to dinner or to tea—but she never folded her hands and smiled and simpered and chatted and wished away back in her heart that they were all in Jericho. She just kept that shining needle busy, because she saw it was her duty; that without her constant labor, the children and the husband must suffer. But oh! the time wasted, worse than wasted, now-a-days by those who give themselves up to callers! They have passed over the service of the maelstrom of fashion and they cannot stop if they would. They have ventured on a new house—new style—and new habits. It is very vulgar, they have heard, to work in the presence of visitors, and so they fold their hands and compose their anxious faces. One friend is gone, and the fingers fly to their task just as the door bell rings and in comes another, and down goes the work again.

Ladies, there is no merit in this affectation of idleness. Nothing is more despicable than a drone. Nature is never idle—God himself the universal worker, is forever employed—how can you waste your precious time? What! ashamed to show your love for your children, your husband—ashamed to be caught in useful

occupation? If in connection with your needle you could not use your intellect, your sight, your conversational powers, then might some plea be rendered; but you have no excuse. Meet your friends with your work in your hand. Banish this pernicious custom that is sending so many women headlong to ruin. We speak strongly, but who will dare say, falsely? We repeat that when we dress our daughters in fine wrappers, elaborately worked, and extravagantly ornamented, and send them up to the parlor to lounge, book in hand upon the sofa, to listen to the rapid talk of foolish acquaintances by the hour—we are sending them headlong to ruin. And not only they, but the men who are to be their future husbands; the unfortunate, spindling, puny-faced being who may sometimes profane their lips with the word "mother." You had better, oh! mother, shut your child from the light and the air forever, than make her a curse to herself and society. You had better follow her to her grave and cover her coffin with your own hands, than educate her with such notions and for such purposes. An idle woman is like a harp with its strings all broken—there is no melody in her life.—*Ladies Enterprise.*

LIST OF PAYMENTS RECEIVED.

| NAMES. | POST OFFICE. | STATE. | AM'T. |
|---|--------------|--------|--------|
| Geo A Addison, Edgefield c. h., | | S. C. | \$3.00 |
| Late Col L N Griffin, | " | " | 4. |
| Mrs Ann Griffin, | " | " | 2. |
| Gen M L Bonham, | " | " | 2. |
| Hon W E Haskel, Rantouls, | " | " | 2. |
| Capt J D Woodsides, Cedar Falls, | " | " | 1. |
| A G Turner, Sleepy Creek, | " | " | 2. |
| H M Earle, Earlesville, | " | " | 1. |
| Dr S J Bailey, 4 Mile Branch, [vol 6] | " | " | 1. |
| Maj A P Martin, Martins Depot. [5&6] | " | " | 2. |
| Jas Bell, Darlington c. h., | " | " | 1. |
| B Payne, M D, Charleston, | " | " | 1. |
| Dr D D Graves, | " | " | 1. |
| John Harleston, | " | " | 1. |
| J P Creighton, Rock Hill, | " | " | 1. |
| A F Walker, Catawba, | " | " | 1. |
| T M Boulware, Rossville, | " | " | 2. |
| E H Griffin, 12 Mile, | " | " | 1. |
| E Herndon, Tunnel Hill, | " | " | 1. |
| John Owens, Double Branches, | " | " | 1. |
| Benj Holland, Fair Play, | " | " | 1. |
| Maj T L Gourdin, Pinevill, (vol. 8.) | " | " | 1. |
| H W Garlington, Bluff Rabun, | " | " | 5. |
| W P Sullivan, Millway, | " | " | 2. |
| F H Zahler, Blue House, | " | " | 1. |
| John Brownlee, Temple of Health [y. 2 to 8] | | | 7. |
| Robt Underwood, Marion, | | Ala. | 1. |
| Dan'l Tims Pickensville. [vol 5] | " | " | 1. |
| Dr. B W Earle, Aberdeen, | | Miss. | 3. |
| W B Evans, | " | " | 1. |
| Dr. Matthew Clay, Macon, | " | " | 1. |
| Mrs. Calier, Clarksville, | | Ga. | 5. |
| Chas W Sorrells, Danielsville, | " | " | 1. |
| R P Briggs, Blackjack Valley, | | N. C. | 1. |

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BOOTS AND SHOES FOR CASH.

W. S. WOOD,

MANUFACTURER AND DEALER IN
BOOTS, SHOES AND BROGANS,
No. 185, Richardson St., First Door Below
the Market, Columbia, S. C.

HAS now in Store a large and well selected assortment of all descriptions of goods usually found in a Shoe Store, Negro's peg and nailed Brogans, Stitch Downs, House Servants' Shoes, all classes, which are offered by the case, dozen or single pair, at the lowest figures, CASH.

—ALSO—

LADIES' FINE BLACK AND COLORED GAITERS, Ladies' Kid and Morocco Walking Shoes and Slippers, from the house of J. Miles & Son, Philadelphia

—ALSO—

GENTS' FINE CALF, DRESS, PUMP AND STITCHED BOOTS, of his own manufacture.

—ALSO—

French and American CALF SKINS, Oak and Hemlock Sole Leather.

N. B.—The manufacturing department is under the superintendence of an experienced workman, and all work entrusted to his care warranted to give satisfaction.

W. S. WOOD.

185, Richardson Street, Columbia, S.C.
April, 1856. [4—tf]

ROBERT HAMILTON.

M. W. BYTHEWOOD.

HAMILTON & BYTHEWOOD.
Auction and Commission Merchants,
FOR THE SALE OF
REAL ESTATE, NEGROES, COTTON FLOUR,
GRAIN,
AND ALL MANNER OF
PRODUCE AND MERCHANDISE,
294 Exchange Row, Richardson Street,
COLUMBIA, S. C.

REFERENCES.

Stenhouse, Allen & Co. Wittie & Goodwin
Charleston; John A. Crawford, Edwin J. Scott, Rich-
ard Anderson, Richard O'Neill, Columbia, S. C.;
James R. Aiken, Wicksboro', S. C.; James Pagan
& Co., Chester C. H., S. C.; S. N. Stowe & Co.,
Yorkville, S. C.; W. W. Elms, Charlotte, N. C.; Dr.
Edward Sill, Salisbury, N. C.; R. C. Cooke, Con-
cord, N. C.; Dr. W. Holy, Lexington, N. C.
February, 1856, [1—1f]

H. MULLER.

R. D. SENN.

MULLER & SENN,
Wholesale and Retail Grocers,
No. 249 Richardson Street,
COLUMBIA, S. C.

A Full and Complete Stock of Groceries
ALWAYS ON HAND.

January, 1856, [1—1f]

Land for Sale.

I have a valuable tract of land near Pendleton, that I would sell at a fair price and on accommodating terms. The tract contains 700 acres, about 300 of which is under good fence and in cultivation. This place was a few years since owned and occupied by the late venerable F. K. Huger, by whom it was much improved and embellished. The dwelling house is large and conveniently arranged, say 100 by 45 feet, 12 or 14 rooms and 8 fire-places. Kitchen, smoke-house, dairy with a dry-well, ice-house, bathing-room &c., all ample. In the garden, which is laid out with much taste, there is a hot-house of pisa work, a graper and fruit of the most select varieties, with shrubbery of all kinds. The out houses are not surpassed by any in the up-country; such as stables for horses and cattle, barns, corn cribs, thrasher and cotton gin houses, blacksmith shop, &c. Several good springs convenient. The road from this place to the village is nearly level, and one of the best carriage roads in the up-country. But if you desire to buy a pleasant and healthy residence in the up-country, in full view of a long range of mountains, and on which you may raise provisions of every kind in abundance, then come and see and judge for yourself.

GEORGE SEABORN.

Pendleton, S. C. August, 1855.

A. F. M.

THE next Regular Communication of PEN-
DLETON LODGE, No. 34, A. F. M.,
will be held in the Lodge Room, on Mon-
day, September 15th, at 7 o'clock, P. M.

M. L. SHARPE, Sec'y.

W. H. D. GALLARD, W. M.

N. A. HOXIE,

WHOLESALE AND RETAIL DEALER
IN

RICH, FANCY, AND STAPLE DRY GOODS,
FOR CASH.

AGENT FOR THE CELEBRATED KER-
SEYS AND JEANS,
MANUFACTURED BY F. & H. FRIES,
OF SALEM, NORTH CAROLINA.

Weekly additions made to my Stock through
out the year.

The latest styles of FANCY DRESS
GOODS, EMBROIDERES, &c., &c., may
always be seen at N. A. HOXIE'S.
March, 1856. [3—7m *]

CARPETS AT COST!

A LARGE STOCK

OF

BRUSSELS, THREEPLY
AND SUPER-INGRAIN
CARPETS.

PATTERNS ALL NEW.

WILL be sold at prime New York cost, in
order to make room for my extensive as-
sortment of

NEW GOODS!

Just being received. If you wish an elegant Carpet
at less than

Charleston Wholesale Prices,

Now is the time to buy from

N. A. HOXIE.

Nov. 19.

IMPROVED COTTON GINS.

WE beg leave to call the attention of the
citizens of Anderson District, and the
Cotton growing region generally, to our improved
COTTON GINS, which gave such general satisfac-
tion last season.

We can say truthfully, and challenge any other es-
tablishment to say the same, that we had but one Gin
returned last season from bad performance. This is
no little encouragement to us, and we trust will strong-
ly recommend us to planters.

For several years we have been liberally patronized
by the planters of Abbeville, Edgefield, and Ander-
son, and hope by faithful work to merit a continuance of
it. Our agents will occasionally pass through the va-
rious sections of country, and will gladly receive all
orders which may be given them. Persons purchasing
Gins from us can have a trial of Ten Bales of Cotton,
and if they are not satisfied it will be taken away and
another promptly forwarded. Our terms will be
made known by our Agents, and shall be as accommo-
dating as those of any other good establishment. In
all cases Gins will be delivered free of charge, either
at the Gin-house or nearest depot. All orders will be
thankfully received and promptly attended to.

HENDERSON & CHISOLM.

4-6f.

Corington, Ga., April, 1853.

THRESHING MACHINERY,

AND

HARVEST TOOLS,

OUR supply of Machinery, &c., for the approaching harvest is as extensive as usual, and made up of best materials, and by experienced workmen. The HORSE POWERS and THRESHING MACHINES made by us are PARTICULARLY EXCELLENT, and generally have gained the *Highest Premium* at our State Fairs, and those of Virginia and North Carolina.

The stock made for June and July demand, may be rated as follows, viz:

120 No. 2 and 3 SPUR-GEARED HORSE-POWERS, arranged for four a six horses, and capacity sufficient for 8 a 12 mules; both these are premium machines. Price \$110 a 140

7 BEVEL GEARED HORSE-POWERS, main wheel made in segments, and in every respect a first rate power. This machine bore off the first premium at the late Maryland State Fair. \$125

—ALSO—

1 and 2 HORSE RAILWAY POWERS. \$85 a 110

These are valuable only for small farms, those who work heavy horses and who require the small amount of power that one or two horses will give.

150 THRESHING MACHINES, made with open wrought Iron Elastic Cylinders, and warranted the most perfect machine of the kind in the city or State. Price as follows.

Width of Cylinder, Inch—16, 20, 25, 30.

Price, \$40, 45, 55, 65.

Price with Straw Carriers \$55, 60, 73, 85.

Driving Belts 40 a 60 foot, \$12 a 18.

100 FANNING MILLS—Three sizes, all made with double screens, and inferior to none in this market, either as regards finish or power.

Price \$28, 33 a 38.

800 GRAIN CRADLES, with warranted Scythes attached, Price \$4 a 5.

50 GRANT'S PATENT do. \$5 25.

100 HORSE HAY and GLEANING RAKES, \$8, 9 & 11.

850 CULTIVATORS, 10 sorts made suitable for all the various crops cultivated, \$5, 6 and 8.

3000 two and three Farrow ECHOLON PLOWS, for cultivation and seeding, \$5 50 a 6 50.

—ALSO—

HAY FORKS, HAND RAKES, WHEAT STONES, RIFLES, GRASS and GRAIN SCYTHES, GRASS SWATHS, GRASS SCYTHES HUNG READY FOR USE.

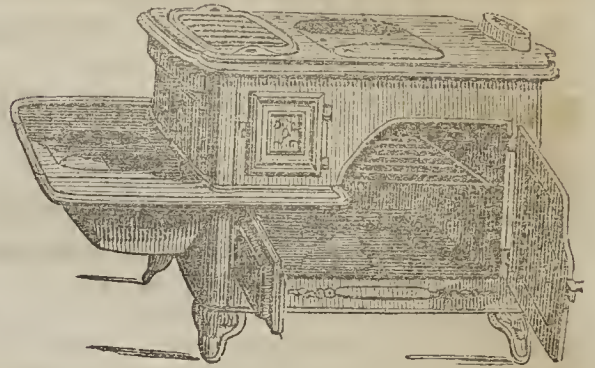
HUSSEY'S PATENT

Reaping and Mowing Machines

Always on hand a supply of Hussey's unrivalled REAPING and MOWING MACHINERY. For Prices of these, see our General List, which also contains a List of PLOUGHS, STRAW CUTTERS, CORN SHELLERS, ROLLERS, HARROWS, GARDEN and FIELD SEEDS, TOOLS, and in short every MACHINE, IMPLEMENT, TOOL or SEED, required by the Farmer or Gardener.

R. SINCLAIR, JR. & CO,
MANUFACTURERS & SEEDSMEN,

58, 60 and 62 Light Street Baltimore.
1855.

D. G. WESTFIELD & CO'S.
STOVE REPOSITORY.

THE SUBSCRIBERS TAKE PLEASURE in offering to the citizens of this State as great a variety of STOVES and other GOODS, as ever offered to the public, consisting of

Air Tight Cooking Stoves

Of various kinds, including,

PREMIUM COOKING STOVES

LARGE AND SMALL OVENS.

AIR TIGHT PREMIUM COOKING STOVES.

PARLOR COOKING STOVES,

PARLOR BOX STOVES, HALL STOVES,
FOR CHURCHES, STORES, & C.

Together with a full assortment of plain and Japaned Tin Ware; Britannia, Lifting Pumps Lead and Block Tin. Pipes, Tin Plates, Sheet Iron Ware, and House Furnishing ware generally; also,

MANUFACTURERS OF,
TIN, COPPER, LEAD, & SHEET IRON
WARE.

METALLIC ROOFING

done in the most approved manner, and
with dispatch.

The Trade supplied with TIN WARE, at whole sale, upon the lowest terms.

D. G. WESTFIELD, & CO.

Next to the Bridge,

1854.

Greenville So. Carolina.

HAYNE-ST. FIRE, CHARLESTON, S. C.

CHARLESTON, S. C., MAY, 1844.

To S. C. Herring, Esq., New York:

DEAR SIR: The "Salamander Safe" which we procured from you, was in our Store, No. 29, Hayne-st., at the time of its destruction by fire on the 18th April last. The entire building together with seven others in the same block were destroyed.—This safe was buried amid the ruins for several days when it was dug out, and very much to our surprise from the combustible nature of our business (wholesale Drugs and Medicines,) on opening it to find its contents to be in perfect order, and from this we are satisfied that your Safes are entitled to public confidence. You will please ship us another of the same size at once, and oblige, very respectfully, yours,

P. M. COHEN, & CO.,

Importers of Drugs and Medicines, 29 Hayne-st.

H. H. WILLIAMS is Agent in this City for "HER-
RINGS SALAMANDER SAFES," which can be
procured of all sizes and prices.

Jan. 1, '55.

[1-11]



(DOUBLE POWER AND COMBINED THRESHER AND WINNOWER IN OPERATION.)

**NEW YORK STATE
AGRICULTURAL WORKS,
BY
WHEELER, MELICK & CO.**

WE are Manufacturers of Endless Chain Railway Horse Powers, and Farmers and Planters Machinery for Horse Power use, and are owners of the Patents on, and principal makers of the following valuable Machines.

Wheeler's Patent Single Horse Power,

AND

**OVERSHOT THRESHER
WITH VIBRATING SEPARATOR**

This is a One Horse Machine, adapted to the wants of medium and small grain growers. It separates grain and chaff from the straw, and threshes about 100 bushels of wheat or twice as many oats per day, without changing horses—by a change nearly double the quantity may be threshed.—Price \$128.

Wheeler's Patent Double Horse Power,

AND OVERSHOT THRESHER

WITH VIBRATING SEPARATOR.

This Machine is like the preceding, but larger, and for two horses. It does double the work of the Single Machines and is adapted to the wants of large and medium grain growers, and persons who make a business of threshing.—Price \$160.

Wheeler's Patent Double Horse Power,

AND

COMBINED THRESHER AND WINNOWER

(SHOWN IN THE CUT.)

This is also a Two Horse Machine; it threshes, separates the grain from the straw, and winnows it at one operation, at the average rate of 150 bushels of wheat and 300 bushels of oats per day. In out door work, and for persons who make a business of threshing, it is an unequalled Machine.—Price \$245.

Also CLOVER HULLERS, FEED CUTTERS AND SAWING MACHINES.

Our Horse Powers are adapted in all respects to driving every kind of Agricultural and other Machines,

that admit of being driven by Horse Power, and our Threshers may be driven by any of the ordinary kinds of Horse Powers in use—either are sold separately.

To persons wishing more information and applying by mail, we will forward a circular containing such details as purchasers mostly want—and can refer to gentlemen having our machines, in every State and Territory. Our firm have been engaged in manufacturing this class of Agricultural Machinery, 22 years, and have had longer, and more extended and successful experience than any other House.

All our Machines are warranted to give entire satisfaction, or may be returned at the expiration of a reasonable time for trial.

Orders from any part of the United States and Territories, or Canada, accompanied with satisfactory references, will be filled with promptness and fidelity. And Machines securely packed, will be forwarded according to instructions, or by cheapest and best routes.

WHEELER, MELICK & CO.,

Albany, N. Y.

April, 1856.

[5—11]

To Stock Raisers.

MY MORGAN HORSE will stand through the Spring Season at the following places: Ninety-Six, Bozmanns, Cokesbury, Greenwood, and at my plantation, 3 miles below Cambridge, and will be let to mares on the following terms: Five dollars cash in hand for the single visit; ten dollars for the season, and fifteen dollars for insurance. Having heretofore given his pedigree in the Farmer and Planter, I deem it unnecessary now. His colts give general satisfaction, and his business so increasing, I fear I shall be under the necessity of limiting him. **JAMES CRESWELL.**

April, 1856.

4

11

Double Screened Rockaway,

THE

**GREAT PREMIUM FAN,
STILL VICTORIOUS!**

INVENTED and Manufactured by **J. MONTGOMERY & BRO.,** at No. 155 North High Street, Baltimore. Patented Dec. 20th, 1853, and June 20th, 1855. This Fan has taken the First

Premiums at all the leading Agricultural Shows of Virginia, Maryland and North Carolina. We have never been beaten since we improved our Fan, and we do not think there is any Fan in the United States that will do its work as fast and clean as our Rockaway. They work easy, are very simple, can be rigged for cleaning by any intelligent farmer, are very durable, and when out of order can be repaired with great ease, by any mechanic—and they are adapted to cleaning all kinds of grain. We have had ample opportunities to test our Fan, during the present harvest, with several of the latest improved Fans, and our experience is, that we can clean nearly, if not quite, as fast and clean as any two of them in the same time. We think we know what the farmer wants and needs, and that our experience enables us to suit them better than any other person in the Fan business—and they may rest assured that no pains will be spared to give them the best machine in the market. Our Fan has gained its present popularity entirely in consequence of its merits—our sales have increased 50 per cent. in our old districts, showing that those sold heretofore have given full satisfaction. We have sold over 550 Fans this season, and 750 will not more than supply the demand from present appearances. It is an easy matter to put up an article before the public, through the Journals, as some have been this season—but for a Fan to retain its popularity, and to increase in demand, as ours has done in the same counties and districts for 3 and 4 years, is the best evidence of its value. Our sales are extended over six States, namely: Maryland, Virginia, North Carolina, South Carolina, Delaware and Georgia. Having secured Letters Patent for our Fan, in 1853 and 1855, we are now prepared to sell Rights for any State or County not mentioned above. We offer a good chance to any enterprising mechanic who desires to go into business—a business that can be started on a small capital and yield as fair profit as any we know of. We will give all the Patents and any instruction requisite.

Our Fans, delivered on board the vessel in Baltimore, cost \$34. All orders, by mail, attended to as promptly as if made in person.

J. MONTGOMERY BRO.,

Oct. 1, 1855, [11—t] Baltimore.

In addition to our own experience and that of others for whom we have ordered the above Fans, we have a number of certificates of their superiority over all others tried.—Ed. F & P.

THE BEST PORTABLE CIDER MILL AND PRESS IN THE WORLD.

WE are now Manufacturing KRAUSER'S CELEBRATED PATENT PORTABLE CIDER MILL AND PRESS, which has been greatly improved since last season, and is now offered to the public with full confidence, as being beyond all doubt the most complete and effective in use.

This celebrated mill, which has attracted so much attention, not less for its novelty and simplicity than for its great efficiency, is offered to the public upon its own merits, which are of the highest character. During the past two seasons we have had hundreds of opportunities of testing the superiority of this admirable mill, and in every instance it has given entire satisfaction to purchasers. It is believed to be far superior in effectiveness and durability to any thing of the kind in the market. It can be worked by a couple of men to the extent of eight or ten barrels per day.

One of its principal features is the arrangement of the RECIPROCATING PISTONS, which by their alternate action, (an operation at once simple and beautiful,) the apples are irresistibly retained against the revolving teeth till they are torn into a fine pulp.

In other portable machines they are often cut into small pieces, which of course will not so readily part with the juice when subjected to pressure. The press attached to the machine is capable of performing a pressure equal to ten tons.

The arrangements for pressing have been greatly improved and strengthened. The necessity for handling the pomace is entirely obviated. The tubs beneath the grinding apparatus receive the pulp as it falls from the mill. The tubs are then shoved beneath the press, thus saving not only the loss of time, but the waste of labor.

In point of novelty, simplicity, durability, effectiveness and cheapness, Krauser's mill stands unrivalled.

It is adapted to hand or horse power, is made in a style of workmanship, and of a quality of material, altogether superior to any mill ever offered the public. It is warranted to work well.

We therefore confidently ask the attention of farmers and others to this mill, believing that it is just the article for the times, and decidedly the best and cheapest in the market.

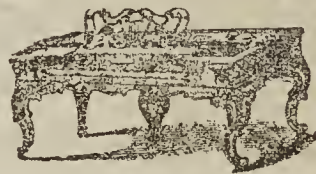
All orders accompanied by the cash, or good Philadelphia references, will meet with prompt attention. Those ordering, should be very explicit in their shipping directions.

PASCHALL MORRIS, & CO.,

Manufacturers and Dealers in Agricultural and Horticultural Implements, Seeds, &c.

N. E. Corner Seventh and Market Sts., Phila.
August, 1856. [8—2r]

PIANO FORTES.



A LARGE and well selected stock of the best makers' PIANOS can be found at all times at RAMSAY'S MUSIC STORE, 178 Richardson street, Columbia.

Special attention is invited to the famous PIANOS of HALLET, DAVIS & Co., which are now rapidly taking the place of all others. They are full, rich and brilliant in tone; elastic true, and easy of touch; of elegant style, beautiful finish, and have patented improvements found in no others. Many PIANOS so confuse and drown the voice that words are entirely lost. The PIANOS of HALLET, DAVIS & Co., are entirely free from this imperfection and from a peculiarity of tone found in them alone, develope and harmonize with the voice, allowing each word to be plainly understood. This we think, is a merit of no slight importance, especially to the ladies.

July 12

ly

PENDLETON FEMALE ACADEMY,

MISS E. H. JEBB, PRINCIPAL.
REV. T. L. McBRIDE, ASSISTANT.

THE Exercises of this Institution will be resumed on Monday, the 4th of August next. Good Boarding may be had at Rev. T. L. McBride's, and other places convenient to the Academy.

July 6, 1856.

[8—2r]